

27 January 2000

Safety

**U.S. ARMY TRAINING AND DOCTRINE COMMAND (TRADOC)
SAFETY PROGRAM**

Summary. This regulation prescribes policies, responsibilities, and procedures for the development, implementation, and evaluation of TRADOC safety programs.

Applicability. This regulation applies to TRADOC installations, service schools, tenant activities, and contractors operating on TRADOC installations.

Supplementation. Supplementation of this regulation is permitted but is not required. Supplementation requires prior approval from Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048. If a supplement is issued, furnish two copies to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048.

Forms. "R" forms located at the back of this regulation are for local reproduction. Have them printed through your forms management officer.

Suggested improvements. The proponent of this regulation is the Chief of Staff (CofS). Send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) through channels to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048.

Distribution restriction. Approved for public release; distribution is unlimited.

Availability. This regulation is available on the TRADOC Homepage at <http://www-tradoc.army.mil>.

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*This regulation supersedes TRADOC Regulation 385-2, dated 30 Jul 93, and rescinds TRADOC Forms 385-2-1-R-E, Apr 93; 385-2-2-1-R, Apr 93; and 385-2-2-2-R, Apr 93.

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Chapter 1

Introduction

1-1. Purpose. To establish policies, procedures, and responsibilities for implementation of the TRADOC Safety Program and ensure protection of the force.

1-2. References. Required and related publications and referenced forms are listed in appendix A.

1-3. Explanation of abbreviations and terms. The glossary contains abbreviations and special terms used in this regulation.

1-4. Responsibilities.

a. Director, Command Safety will—

(1) Report to Commander, TRADOC, through the Chief of Staff, TRADOC.

(2) Serve as principal advisor to the Commanding General (CG), TRADOC and TRADOC staff on all safety and occupational health issues.

(3) Coordinate directly with higher headquarters, other major Army commands (MACOMs), other services, state/federal agencies and other institutions, associations, and nations.

(4) Coordinate, as appropriate, with the Director of Army Safety (DASAF) and pass to DASAF, those issues that have significant Armywide safety and occupational health implications.

(5) Develop command safety and occupational health policy.

(6) Participate in DA-level special reviews, studies, and working groups; the Army Fuse Safety Review Board; Army System Safety Coordinating Panel Technical Sub-panel; TRADOC Materiel Evaluation Committee; Army Explosive Safety Council; North Atlantic Treaty Organization (NATO) Range Safety Working Group; TRADOC Test Schedule and Review Committee; and TRADOC Requirements Review Committee.

(7) Serve as the principal advisor to the TRADOC Executive Safety and Occupational Health Council.

(8) Direct the appointment of an accident investigation board to investigate accidents that do not meet the criteria in Army Regulation (AR) 385-40, paragraph, 4-1, when deemed appropriate.

(9) Review and evaluate all TRADOC safety programs annually.

(10) Serve as the TRADOC Career Program (CP) Manager for CP 12 IAW AR 690-950.

(11) Maintain staff oversight for safety issues relating to ammunition, environmental, fire protection, industrial hygiene, and other loss control elements.

(12) Establish and implement a TRADOC Safety Awards Program to recognize TRADOC personnel and installations for safe performance.

(13) Establish and publish annual accident performance goals for subordinate elements.

(14) Represent TRADOC on all safety issues not listed above affecting or involving the command.

(15) Serve as the proponent for safety and risk management integration into doctrine, training, leader development, organization, materiel, and soldiers (DTLOMS).

b. The Deputy Chief of Staff for Training (DCST) will—

(1) Integrate safety and risk management into training and leader development at TRADOC service schools and training centers.

(2) Integrate hazardous communication (HAZCOM) training into military training in accordance with (IAW) DODI 6050.5.

c. The Deputy Chief of Staff for Combat Developments (DCSCD) will integrate safety and risk management into combat developments at TRADOC service schools and training centers.

d. The Deputy Chief of Staff for Doctrine (DCSDOC) will integrate safety and risk management into doctrine at TRADOC service schools and training centers.

e. The Deputy Chief of Staff for Base Operations Support (DCSBOS) will—

(1) Provide technical advice on medical and occupational health aspects of safety issues.

(2) Administer the Federal Employees' Compensation Act (FECA) Program. Ensure to affect coordination of all occupational injuries or health lost time claims with the Director, Command Safety.

f. Commanders, TRADOC installations and Commandants, TRADOC service schools will—

(1) Be responsible for the protection of all personnel, facilities, equipment, and materials under their charge.

(2) Develop and publish a safety policy memorandum/safety program directive which defines the commander's safety philosophy and provides guidance for safety program implementation.

(3) Ensure safety office is resourced with adequate staff and funds to support an aggressive safety program based on mission/functions requirements.

(4) Serve as the chairperson for the Safety and Occupational Health Council. Commanders may delegate this to the chief of staff or garrison commander.

(5) Designate in writing, a qualified safety and occupational health manager as defined in AR 385-10, responsible for exercising staff supervision of safety and health activities and all aspects of the TRADOC Safety Program. Ensure safety and occupational health manager is guaranteed direct unimpeded access to the commander for matters pertaining to safety.

(6) Consolidate safety personnel and resources into a single office table of distribution and allowance (TDA).

(7) Establish the installation branch safety office as a personal staff organization reporting directly to the installation commander on safety and occupational health issues. The installation chief of staff may provide daily supervision.

(8) In coordination with branch safety manager, integrate safety and occupational health procedures and considerations, including risk management, into the development and employment of all service school products and branch training. Maintain oversight of branch-unique safety issues.

(9) Promote branch safety by—

(a) Monitoring and sharing lessons learned with branch elements worldwide.

(b) The systematic review of after-action reports, accident investigation reports, and near miss reports to develop techniques, tactics and procedures (TTP) to ensure safe mission accomplishment. Integrate those TTPs into branch training and doctrine and ensure worldwide branch dissemination.

(c) Integrating safety and risk management in training.

g. Installation safety managers will—

(1) Serve as the installation/branch safety manager (IBSM) at locations where a TRADOC branch school exists.

(2) Exercise staff oversight for the integration of risk management procedures into branch school mission domains, training operations, and products.

(3) Publish a directive that consolidates local safety and occupational health procedures into a single source publication for subordinate units/activities.

(4) Establish and implement a local awards program for organizational and individual awards. This includes establishment of funding requirements.

(5) Ensure all on-duty training accidents/serious incidents including suicide and serious weather-related events are reported to the Command Safety Office as soon as possible, but not later than (NLT) 0900 Eastern Standard Time (EST) on the first duty day after the accident/incident.

(6) Develop and implement a functional Collateral Duty Safety Officer/NCO program IAW appendix B of this regulation.

h. Branch safety managers not located on TRADOC installations will—

(1) Exercise staff oversight for the integration of risk management procedures into branch school domains, training operations, and products.

(2) Maintain close coordination with the host installation to ensure safety support for base operations and accident prevention services are provided.

(3) Publish a directive that consolidates local safety and occupational health procedures into a single source publication for subordinate units/activities.

(4) Ensure all on-duty training accidents/serious incidents including suicide and serious weather-related events are reported to the Command Safety Office as soon as possible, but NLT 0900 EST on the first duty day after the accident/incident.

1-5. Policy.

a. Risk management and accident prevention are inherent command functions. Protection of the force through risk management enhances the Army's ability to train, fight, and win with minimum cost to the nation.

b. TRADOC's Risk Management Policy.

(1) Commanders will accept no risk unless the potential benefit outweighs the potential loss.

(2) Apply risk management to training and operations at all levels of command.

(3) TRADOC units or organizations wanting to conduct training or operations with a residual risk of EXTREMELY HIGH will forward their request through the appropriate general officer, installation commander or commandant to HQ TRADOC, ATCS-S. Such requests must include a risk assessment and the rationale or need for the acceptance of an extremely high residual risk.

(4) Non-TRADOC proponent commanders or commandants wanting to conduct training or operations with a residual risk of EXTREMELY HIGH on a TRADOC installation will forward their request through their MACOM chain of command to HQ TRADOC, ATCS-S. Such requests must include a risk assessment and the rationale or need to accept an extremely high residual risk.

c. Risk decision authority is based upon the residual risk of an activity after application of control measures. The TRADOC CG has established risk acceptance authority as follows:

(1) Extremely High risk—TRADOC CG, Deputy Commanding General (DCG), or Chief of Staff.

(2) High risk—installation commander of general officer rank.

(3) Moderate risk—Colonel or equivalent as designated by the installation commander.

(4) Low risk—As designated by the installation commander.

d. Safety and Occupational Health Services relating to Standard Army Safety and Occupational Health Inspections (SASOHI), accident reporting, abatement of hazardous conditions, etc., are base operations (BASOPS) functions and, as such, are the function of the host installation safety office.

e. Safety managers for TRADOC units, organizations, and activities not located on TRADOC installations will ensure host tenant agreements are established to provide for BASOPS safety and accident prevention functions.

1-6. Safety program evaluations. The TRADOC safety program evaluation is a tool to provide the command with current assessment of the effectiveness of its Force Protection (safety) efforts, identify systemic problems to be addressed at TRADOC headquarters, assess risk management integration, and to ensure compliance with applicable standards and policies.

a. The Director, Command Safety will ensure all subordinate TRADOC installations, activities, and school safety and occupational health programs are evaluated annually.

b. The annual evaluation program schedule will be published at the beginning of each fiscal year. Potential mission conflicts or request for changes to a scheduled evaluation will be submitted in writing from the commander or chief of staff involved.

c. The U.S. Army Center for Health Promotion and Preventive Medicine may evaluate occupational health elements during the annual evaluation. Commanders will receive a single report containing consolidated findings/recommendations.

d. Evaluations will be based on current regulatory requirements and report findings will list all deficiencies discovered during the evaluation. Deficiencies are defined as a violation of a law, regulation, or TRADOC policy.

e. A written evaluation report will be forwarded to the installation, activity, or school concerned. A written response will be prepared and returned to HQ TRADOC, ATTN: ATCS-S, stating what corrective action has been taken to fix or eliminate each deficiency noted during the evaluation. Response will include specific information to include who is responsible for corrective action and when it will be accomplished.

1-7. Safety and Occupational Health Advisory Councils.

a. Each installation/school will establish a Safety and Occupational Health Advisory Council.

b. Councils will meet at least semiannually.

c. Commanders may establish subordinate safety committees.

d. The aviation safety officer will be a member of the installation Safety and Occupational Health Advisory Council.

e. Written records of meetings will be kept to satisfy Army and Occupational Safety and Health Act (OSHA) requirements.

1-8. Command Sergeant Major (CSM) Safety Action Council.

a. The CSM Safety Action Council was established and is chaired by the TRADOC CSM.

b. Membership in the TRADOC CSM Safety Action Council (SAC) will be limited to the senior CSM at each TRADOC major subordinate command (MSC).

c. Each TRADOC major subordinate command (MSC) CSM member of the TRADOC SAC will establish and chair a CSM Safety Council at their respective location. Organization and function of these councils will be at the discretion of the senior CSM, but as a minimum will include CSMs and first sergeants (as appropriate) of subordinate units and activities. U.S. Army Forces Command (FORSCOM) units are encouraged to participate.

d. The TRADOC SAC will meet quarterly via video teleconference (VTC). Subordinate councils should also meet at least quarterly or more often as needed.

e. Routine agenda items should include a review of past performance, lessons learned, near misses, and an assessment of risks associated with future training or operations.

1-9. Deviations. When necessary to deviate from this regulation, send a written request to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048 prior to initiating deviation. Identify specific conflict(s) with this regulation and state reasons for the request and alternate measures.

Chapter 2 Ground Accident Reporting and Records

2-1. General. TRADOC installations, service schools, and activities must comply with the requirements of AR 385-40, DA Pamphlet 385-40, and this regulation. Safety managers will support the Civilian Personnel Office's efforts to reduce civilian injuries/illness. Safety personnel will be members of the installation Federal Employees' Compensation Act (FECA) working group.

2-2. Accident accountability and reporting.

a. When a Class A or B accident occurs on a TRADOC installation or activity, the safety manager will

immediately telephonically notify the Commander, U.S. Army Safety Center (USASC), (334) 255-2660/3410 or DSN 558-2660/3410, and TRADOC Director, Command Safety, (757) 728-5904; (757) 727-2194, or DSN 680-5904/2194. After duty hours, notify the TRADOC Emergency Operations Center (EOC), (757) 727-2256 or DSN 680-2256. Use the TRADOC Form 385-2-3-R-E, located at the back of this regulation, for notification. Use electronic messages containing essential elements of information (EEI), figure 2-1, for fatal or serious accident supplemental reporting; however, make initial notification telephonically. The TRADOC installation/activity experiencing a Class A or B accident is responsible for notifying other involved MACOMs when appropriate.

b. Holiday weekend accident prevention after-action reporting. Installation Safety Offices will report fatal accidents and other serious incidents/accidents occurring during any holiday weekend telephonically to (757) 728-5904 or DSN 680-5904. This telephonic report is due at HQ TRADOC NLT 1200 on the first work day following the holiday weekend. Negative reports are required.

c. Electronic Exposure Reports will be submitted to HQ TRADOC, ATCS-S quarterly.

(1) Submit Exposure Reports electronically using the Reachout Software program. Reports will be submitted by the 20th day of the month following the end of each quarter. Provide the information found in figure 2-2.

(2) Civilian exposure data will not include non-appropriated fund (NAF), contractor, or non-TRADOC personnel.

d. Quarterly Military Injury Reports are due at HQ TRADOC NLT the 20th day of the month following the end of each quarter. Format for submitting data is found

in figure 2-3. Reports may be faxed to HQ TRADOC, (757) 727-2145 or DSN 680-2145.

e. Injuries to military or civilian personnel in a temporary duty (TDY) status at a TRADOC organization will be recorded by the TRADOC installation provided the TDY orders state the individual will be TDY for over 30 days. If the individual is TDY for less than 30 days, the TRADOC installation prepares DA Form 285 for Class A, B, C, or D on-duty accidents and DA Form 285-AB-R for off-duty accidents. When completing the appropriate form, identify the individual's home station in blocks 2, 3a, 3b, 18, and 71 of DA Form 285 and blocks 5a through 5d of DA Form 285-AB-R. In either case, a copy of DA Form 285 or DA Form 285-AB-R will be sent to the individual's home station.

f. When a central motor pool furnishes a vehicle to drivers from organizations other than TRADOC, charge the driver's organization with the accident. This requires the installation/activity to break out mileage to ensure the driver's organization gets credit for all mileage driven during the quarter.

g. Report General Services Administration (GSA) vehicle accidents which exceed the Army motor vehicle accident cost criteria.

h. Charge damage to vehicles and equipment loaned to a non-TRADOC organization to the using organization, even if exposure mileage cannot be recorded by the using organization. Responsibility for completion of DA Forms 285/285-AB-R rests with the using organization.

2-3. Accident report tracking and analysis.

a. IBSMs will establish a local system for receiving accident feeder information. As a minimum, feeder information will include:

(1) Military police blotters (accidents only).

ESSENTIAL ELEMENTS OF INFORMATION (EEI) FOR FATAL OR SERIOUS ACCIDENTS	
A.	NAME: _____ RANK: _____ SSN: _____ UNIT: _____
B.	DUTY STATUS: ON _____ OFF _____ TYPE TRAINING: _____ COURSE ATTENDING: e.g., BCT, AIT, OBC, ETC. _____ LEVEL/POINT OF TRAINING: e.g., Day 4 of Week 1, week 1 of 6 _____
C.	SYNOPSIS OF ACCIDENT: _____
D.	CONTRIBUTING FACTORS: WEATHER: _____ MEDICAL FACTORS: _____
E.	CONTROL MEASURES/PLANS: _____ LEVEL OF SUPERVISION, BOTH REQUIRED AND IN EFFECT AT TIME OF INCIDENT. _____

Figure 2-1. Essential elements of information for fatal/serious accidents

- (2) Military police traffic accident reports.
- (3) Serious incident reports (accidents only).
- (4) Estimated cost of damage (ECOD) reports.
- (5) Admission and disposition (A&D) sheets.
- (6) Fire reports.
- (7) SF 91s (Motor Vehicle Accident Report).
- (8) Staff Judge Advocate claim data (accidents only).
- (9) Marine casualty reports.
- (10) Casualty reports.
- (11) EOC.

b. Gather, track, and analyze near miss incidents and Class D accidents, to include range and live fire

training incidents, to establish trends and identify problem areas for use in developing countermeasures.

c. TRADOC organizations will ensure that all individuals injured during training or mission sustainment reporting to troop medical treatment facilities have in their possession a TRADOC Form 385-2-5-R-E, Record of Injury. Section I of this form will be completed by the supervisor (military or civilian) and given to the injured person. The form will be taken to the medical treatment facility by the injured person and given to the medical officer or attendant performing medical treatment.

(1) When the injured person is released from the medical treatment facility, one copy (copy 3) will be kept on file at the medical facility, one copy will be returned to the unit or organization and given to the supervisor as a record of the individuals disposition, and the third copy will be forwarded to the installation safety office.

EXPOSURE REPORT Installation Accident Exposure Report Quarter, FY

1. **Inst.** First three letters of your installation/school/activity.
2. **FY.** The current fiscal year for which the data is applicable.
3. **Qtr.** The quarter for which the data is applicable.
4. **Military Strength.** The average TRADOC military strength for the reporting period for this installation, school, or activity to include Reserve Component (RC), Army National Guard (ARNG), or other military assigned to a TRADOC unit for more than 30 days, and the strength of any TRADOC tenant.
5. **Civilian Strength.** The average TRADOC civilian strength for the reporting period for this installation, school, or activity NOT including contractor or NAF personnel, but including the strength of any TRADOC tenant.
6. **Miles Logged.** The total number of miles logged on TRADOC vehicles assigned to your installation, school, or activity for the reporting period.
7. **Number of DA 285s.** The total number of DA 285s submitted to the U.S. Army Safety Center during the reporting period.
8. **On-Duty Military Injury.** Total number of Class A through C injury to on-duty TRADOC military personnel.
9. **Off-Duty Military Injury.** Total number of Class A through C injury to off-duty TRADOC military personnel.
10. **Total MDI.** Total on-and off-duty military injuries for the quarter.
11. **Military Fatalities.** Total number of military fatalities (shown as military injury also).
12. **Property Damage Accidents.** An Army accident which results in total cost of property damage of \$2,000 or more. In those cases where damage is over \$10,000 and the TMP breaks out the damages in two separate costs, enter the total of the two costs.
13. **Army Motor Vehicle (AMV) Accidents.** An accident (Class A through C) involving a motor vehicle that is owned, leased (includes General Services Administration (GSA) and government-owned, contractor operated vehicles that are under full operational control of the Army; for example, hand receipt or like document), or rented by DA (not an individual), to include RCs.
14. **Aviation Accidents.** Includes Class A through C, Army aircraft accidents, flight-related accidents, and aircraft ground accidents.
15. **Total Cost.** Total cost of all recordable accidents occurring during the quarter, to include fire damages.
16. **Lost Time FECA Claims.** Injury/illness to Army civilian personnel reported on Department of Labor (DOL forms for Continuation of Pay/Compensation, CA-2, Notice of Occupational Disease and Claim for compensation.
17. **POC.** Name of individual entering data.
18. **Phone.** DSN telephone number.

Figure 2-2. Exposure report

INSTALLATION:										
FY _____ QTR _____										
RPT NO.	TYPE ACCID	ACTV LEVEL	INJURY SUSTAINED	CAUSE	ON DUTY	OFF DUTY	DAYS LOST	TRADOC	OTHER MACOM	
Suggested Abbreviations:										
AB	Airborne				OC	obstacle course				
AIT	Advanced Initial Training				Other	Other (Specify)				
AMV	Army Motor Vehicle				OSUT	One Station Unit Training				
AOV	Army operated vehicle				PASS	Passenger				
BCT	Basic Combat Training				PP	Permanent Party				
CBTSLD	combat soldiering				PI	Personal Injury				
CC	confidence course				PIO	Personal Injury, Other				
Cold	cold injury				POVA	Privately Owned Vehicle, Automobile				
FI	fire incident				POVM	Privately Owned Vehicle, Motorcycle				
FTX	field training exercise				PLF	Parachute Landing Fall				
HEAT	heat injury				PT	Physical Training/Calisthenics				
HYPOTHERM	hypothermia				S&R	Sports & Recreation				
IET	Initial Entry Training				SLD	soldiering				
MAINT	maintenance				STF	slip, trip, fall				
MH	material handling				STU	student				
MA	Maritime				TNG	training				
OBC	Officer Basic Course				UAV	Unmanned Aerial Vehicle				

Figure 2-3. Format for submitting data for Quarterly Military Injury Reports

(2) The supervisor will keep one copy of injury record in the persons training/personnel file and complete as appropriate the DA Form 285, U.S. Army Accident Report or DA Form 285-AB-R, Abbreviated Ground Accident Report, and forward to the installation safety office within 30 days.

(3) The record of injury form will be used to track those injuries that are not normally reported on the hospital A&D report.

(4) The safety office will maintain these records to establish trends, identify problem areas and develop counter measures in injury prevention.

2-4. Accident investigation.

a. An in-depth accident investigation for all Class A and B on-duty accidents, training accidents, and other special case accidents as determined by Director, Command Safety, will be conducted. Forward the original and one copy of all Centralized Accident Investigations (CAIs) to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048 for processing NLT 90 days after the accident. The installation commander or school commandant must review and sign formal CAI reports (appendix C).

b. Installation commander or school commandant will review and sign all Class A and B accident reports on DA Form 285, block 69, DA Form 285-AB-R, block 42.

c. Send a copy of all Class A and B accident reports to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048 within 30 days of occurrence (RCS CSOCS-308).

d. Installation safety offices equipped to electronically transmit DA Form 285/285-AB-R to report

accidents to the U.S. Army Safety Center should do so. If unable to electronically transmit the accident report, provide the original, hard-copy version of DA Form 285/285-AB-R to USASC.

e. Installation Safety Offices will conduct preliminary investigation of all fatalities that are not homicide, suicide, or bonafide/verified as due to natural causes. Provide EEI to TRADOC Command Safety Office as soon as possible but within 1 day of occurrence.

2-5. Fire incident reporting.

a. Installation Fire Departments will ensure all fire reports are electronically submitted to the U.S. Navy Safety Center, using the Department of Defense Fire Incident Reporting System (DFIRS).

b. A copy of DD Form 2324 (DOD Fire Incident Report) will be provided to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048 or FAX (757) 727-2145 or DSN 680-2145.

c. Installation Fire Departments will provide quarterly No-Loss Fire Reports to the Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048, FAX (757) 727-2145 or DSN 680-2145. Provide information found on TRADOC Form 385-2-6-R-E. Reports are due NLT the 20th of the month following the end of each quarter.

2-6. Explosive and chemical accident reporting.

a. Installations will comply with AR 385-40 and chapter 7 of this regulation for reporting explosive accidents.

b. To notify the Department of Defense Explosive Safety Board (DDESB) of explosive and chemical agent mishaps, see appendix D.

2-7. Aviation accident reporting. Aviation accident reporting requirements are found in chapter 3.

Chapter 3 Aviation Safety

3-1. Responsibilities.

a. Director, Command Safety exercises staff oversight of aviation safety and Commander's Aviation Accident Prevention Program plans within TRADOC.

b. Installation commanders will—

(1) Maintain a current authorized full-time position for a qualified Aviation Safety Officer (ASO) at installations with airfields supporting aviation activities.

(2) Ensure coordination with tenant aviation units concerning aviation safety responsibilities, functions, and funding.

(3) Comply with policies regarding aviation safety component of force protection per AR 385-95.

c. IBSMs will—

(1) Ensure airfields at their installations are staffed with a qualified ASO assigned as a primary duty.

(2) Be briefed on results of semiannual Aviation Accident Prevention Surveys (AAPS) for organization or flight facilities within their jurisdiction.

(3) Provide 'generic' safety promotional items to the ASO for distribution IAW local procedures.

(4) Review aviation-related contracts for safety issues prior to award.

(5) Attend aviation safety council meetings or designate a representative to attend.

d. Aviation unit/airfield commanders/managers will—

(1) Comply with requirements of ARs 95-1, 385-95, and other applicable directives.

(2) Establish and resource primary duty position for a full-time, school trained ASO for the installation airfield (if applicable).

(3) Ensure a complete AAPS is conducted semiannually.

(4) Appoint a Foreign Object Damage (FOD) Officer/NCO to implement FOD prevention program. This may be an additional duty for any unit officer/NCO other than ASO or the Aviation Maintenance Officer. Ensure surveys are conducted minimum once per month.

(5) Develop a detailed, written pre-accident plan that specifies duties, responsibilities and immediate actions for personnel involved in accident notification procedures, search and rescue, accident investigation and equipment recovery.

(6) Develop standing operating procedures (SOP) for all aviation operations on the facility or airfield. AR 385-95 addresses the minimum subjects that must be in the SOP.

(7) Rehearse and review the adequacy of pre-accident plans a minimum quarterly.

(8) Develop and implement unit Aviation Life Support System (ALSS), Hazardous Communication (HAZCOM), Hazardous Material (HAZMAT), and Hearing Conservation programs.

(9) Ensure ASO programs have adequate resource support to include any aviation-specific safety awards.

e. Aviation safety officers will—

(1) Manage the unit/airfield safety program at the airfield/unit and comply with ARs 95-1, 385-95, and other applicable directives. The primary process the ASO uses to manage the safety program is the five-step risk management model.

(2) Advise and assist the unit or airfield commander and staff in the development of a safety policy, safety goals, objectives, and priorities.

(3) Be the commander's representative for all aviation safety issues. Provide guidance and recommendations to all aviation activities and units on the installation.

(4) Assist the airfield/unit commander with the development and administration of the pre-accident plan.

(5) Conduct semiannual AAPS of all aviation operations.

(6) Administer the Operational Hazard Report (OHR) management procedures.

(7) Monitor the FOD Prevention Program.

(8) Monitor the HAZCOM and HAZMAT programs.

(9) Monitor the unit aviation maintenance program.

(10) Monitor the ALSS Program.

(11) Ensure the airfield/unit safety bulletin boards and aviation safety functional files are maintained IAW AR 25-400-2.

(12) Act as recorder for aviation safety councils.

(13) Establish an ongoing analysis program to

identify current and projected aviation safety issues and recommend solutions to those issues.

(14) Be a voting member of the Installation Safety and Health Council and the Installation Planning Board.

3-2. Policy.

a. Each installation with an operational airfield or assigned aircraft will establish procedures to—

(1) Establish and maintain a current pre-accident plan IAW AR 385-95.

(2) Provide a copy of plan to all personnel and agencies with post accident duties and responsibilities included in the pre-accident plan.

(3) The airfield pre-accident plan will be tested quarterly.

(4) Ensure the pre-accident plan addresses the hazards associated with exposure to composite materials. Pre-accident plans should include HAZCOM, emergency response, and hazardous material cleanup.

b. Aviation safety meetings.

(1) Aviation safety meetings will be conducted monthly.

(2) All assigned flight crewmembers are required to attend monthly safety meetings.

(3) The ASO will keep minutes of monthly safety meetings.

(4) Aviator and crewmember classes may be combined as appropriate.

c. Foreign object damage (FOD).

(1) Because of FOD and personal injury potential, jewelry (rings, watches, necklaces, etc.) should not be worn when inspecting or maintaining aircraft.

(2) With the exception of helmets and cold weather headgear, headgear should be removed before going on the flight line.

d. Risk management.

(1) Commanders will integrate risk management into aviation mission planning and execution at every level. The risk management process begins at mission conception and continues until mission completion. Apply the process with the goal of eliminating hazards where possible and reducing residual risks to acceptable levels. (See Training Circular (TC) 1-210, the *Commander's Guide to the Aircrew Training Manual*, chapter 5, Risk Management, as a guide for implementing this program.)

(2) Units should develop a risk assessment tool such as matrices and diagrams for mission planning

purposes. Commanders must determine the usefulness and content of any risk assessment tool. An analysis of specific hazards must be completed, and effective countermeasures developed, as part of the risk management plan.

(3) Approval authority. Acceptance of residual risk is limited to the commander as specified below.

(a) Missions/operations with an extremely high risk will be forwarded through command channels to TRADOC CG for approval.

(b) Missions/operations with high residual risk are approved by general officer assigned to installation.

(c) Missions/operations designated medium and low risk can be delegated for approval as deemed appropriate.

e. Post aviation accident actions.

(1) Comply with the procedures, reporting, and investigation requirements of AR 385-40.

(2) Notify HQ, TRADOC (ATCS-S) as soon as possible when a TRADOC aircraft is involved in a Class A-C accident or when a Class A-C aviation accident occurs on a TRADOC installation, regardless of aircraft ownership. Initial notification will be telephonic to the Command Safety Office or EOC ((757) 727-2256 or DSN 680-2256) after duty hours. DA Form 7305-R will be submitted within 24 hours to HQ TRADOC by FAX ((757) 727-2145 or DSN 680-2145).

(3) Maintain a listing of personnel qualified IAW AR 385-40 to serve on an Army aircraft accident investigation board. Where necessary, develop procedures for mutual support between installations for aviation accident investigation boards. Address matters such as travel and per diem payments in the procedures. Board presidents, acting on behalf of their appointing authority, can make determinations on the scope, technical assistance, and support needed when appropriate.

(4) Send USASC aircraft accident investigation reports of TRADOC aircraft with installation safety office endorsement to Commander, TRADOC, ATTN: ATCS-S, 5A North Gate Road, Fort Monroe, VA 23651-1048.

(5) Director, Command Safety is authorized to sign for the commander as the approving authority when in agreement with the reviewing official. Chief of Staff, TRADOC will sign as the approving authority when the command and reviewing official are not in agreement.

3-3. Installation Aircrew Orientation Program.

Installation airfields will ensure the safety of non-organic military aviation resources operating on or in their vicinity. Installations with operational airfields, heliports, or aircraft training areas will develop, publish, and enforce an aircrew orientation/certification program.

Chapter 4

Branch Safety Proponency

4-1. General. The objective of branch safety proponency is to identify issues and correct problems that affect a soldier's safety. It includes integrating safety into TRADOC mission domains of DTLOMS; monitoring the safety performance of branch modification table of organization and equipment (MTOE) and TDA units and school products Armywide; and developing and publishing branch safety lessons learned and countermeasures.

4-2. Responsibilities.

a. Director, Command Safety will—

(1) Review and provide recommendations on proposed TRADOC policies and procedures for DTLOMS.

(2) Task and track action responsibility within HQ TRADOC to resolve/correct safety issues and deficiencies in DTLOMS.

(3) Function as TRADOC proponent for risk management integration.

b. The DCST will—

(1) Develop policies and procedures to integrate safety and risk management into systems approach to training (SAT), systems training integration processes, and all training and evaluations. Ensure leader development safety training includes instruction on risk management.

(2) Ensure instructor training, staff and faculty and instructor development courses include safety and risk management training.

(3) Coordinate training and leader development issues and documents with Director, Command Safety for review of safety aspects.

c. The DCSCD will—

(1) Develop policies and procedures to integrate safety and risk management into the combat development process (e.g., manpower and personnel integration (MANPRINT)).

(2) Coordinate combat development issues and documents with the Director, Command Safety for review of safety aspects.

d. The DCSDOC will—

(1) Develop policies and procedures to integrate risk management into the doctrine development process.

(2) Coordinate doctrine issues and documents with the Director, Command Safety for review of safety aspects.

e. Commanders, TRADOC installations and Commandants, TRADOC service schools will—

(1) Execute the responsibilities in AR 385-10 for integrating safety and risk management into proponent mission domains (i.e., DTLOMS). Execute, as applicable, the responsibilities of the combat developer, user test agency, training developer, and AR 385-16, paragraph 1-4r(4), for proponent systems and mission areas.

(2) Develop local policies and procedures, and assign responsibilities to integrate safety and risk management into DTLOMS.

(3) Periodically review all training courses to ensure validity of risk assessment under current conditions and adherence to standards.

(4) Maintain a list of high-risk training courses for more frequent monitoring and review to ensure adherence to standards. Include safety and risk management instruction in each leader development course.

(5) Perform training risk assessment of all lesson plans/POIs based on the credible scenario and assign level of residual risk based on the criteria contained in FM 100-14. Ensure periodic review of risk assessments of existing lesson outlines/plans and review when they are changed, revised, or reprinted.

(6) Identify, analyze, and take action (e.g., develop countermeasures) on branch safety issues and accident experience worldwide. Develop and disseminate branch safety EEIs. Integrate safety and risk management countermeasures and lessons learned into DTLOMS and appropriate databases. Track hazards of proponent training and materiel systems.

(7) Address safety in internal and external evaluations of service school products, branch operations, and proponent materiel systems (e.g., post fielding assessments).

(8) Ensure safety and risk management training is provided to combat developers, training developers and evaluators, school instructors, and cadre.

4-3. Risk management. Risk management will be integrated into the military decision making process. To accomplish this, TRADOC will ensure risk management is integrated into all training, doctrine, and operations prepared or conducted by this command. The installation branch safety office will provide technical assistance and apprise commanders on risk management integration.

4-4. Systems safety risk management.

a. The IBSO will monitor the development of branch specific material and develop a position on materiel developer's system safety risk assessments (SSRA) for proponent materiel systems and materiel changes IAW the provisions of AR 385-16, appendix B.

b. TRADOC service schools and MSCs will apply risk management techniques IAW AR 385-16 to eliminate or control hazards associated with proponent products. During the design of material systems and

training tasks, MSCs will identify, evaluate, and develop a position on the acceptability of the safety risks of residual hazards and formally document risk decisions. Risk decision signature authority is as follows:

(1) CG, TRADOC, retains signature authority at HQ, TRADOC (CG, DCG, CofS) for HIGH risk SSRAs, (Part III, Recommendations by the Combat Developer) IAW AR 385-16, paragraph 1-4m(2), figure-1. The proponent commander or commandant will sign and forward to HQ TRADOC, ATCS-S, his or her position on acceptability of HIGH residual risks. Proponent general officer commanders or commandants have signature authority for the TRADOC position on MEDIUM and LOW risk SSRAs. The proponent commanders or commandants may delegate signature authority for LOW risk SSRAs to the Director of Combat Developments.

(2) In the absence of the person with signature authority, the person designated as acting commander/commandant for a general officer may approve the risk assessment or school position on residual risks.

c. User testing. All tests and pretests involving soldiers require safety releases. Proponents will—

(1) Provide a safety release recommendation and request a user test safety release from U.S. Army Test and Evaluation Command (TECOM), ATTN: AMSTE-ST, Aberdeen Proving Ground, MD 21005-5055, for TRADOC-sponsored Concept Evaluation Programs, customer tests, non-materiel force development tests, and experimentation user tests. (NOTE: TECOM will request all other safety releases.)

(2) Obtain a safety release from the branch safety office prior to pre-test troop training for local tests, experiments, appraisals, and demonstrations involving troops.

Chapter 5 TRADOC Safety Awards Program

5-1. General. Safety awards programs recognize organizations and individuals which significantly contribute to accident prevention, thereby, improving TRADOC operations. Safety awards are recognized as an essential part of an effective safety program.

5-2. Responsibilities.

a. Director, Command Safety will—

(1) Provide TRADOC safety input to the Army Communities of Excellence Program.

(2) Comply with AR 672-74, where applicable.

b. IBSMs will—

(1) Establish and implement a local safety awards program for organizations and individuals IAW AR 672-74 and this regulation.

(2) Establish funding requirements to support safety awards/promotional programs.

5-3. TRADOC Safety Awards-Ground.

a. Purpose. TRADOC Safety Awards recognize installations and other TRADOC activities for meeting goals and making significant contributions to the Army safety program.

b. General. This program provides a quantitative system to evaluate TRADOC installations and activities with similar missions and functions to identify which programs are deserving of recognition.

c. Categories. For purposes of this awards program, TRADOC installations and activities are divided into three categories.

Large	Medium	Small/Other
Benning	Cadet Cmd	Carlisle Bks
Bliss	Eustis	Monroe
Gordon	Huachuca	OMMCS(Redstone)
Jackson	Leavenworth	Ord Center(APG)
Knox	Rucker	DLI/Ft Ord
Lee	USAREC	SSI/Ft Jackson
L. Wood		
Sill		

d. Awards. TRADOC Commander's Safety Award of Honor is presented for first place (highest score) in each category. Award presentation is normally done at the spring TRADOC Commander's Conference.

e. Criteria. Safety award criteria is based upon successful safety program management as indicated in the results of the Annual Safety Program Evaluation and the installation, activity, or school's accident rate experience as measured against the TRADOC established Accident Prevention Goals. Nominations are made by the Director, Command Safety and approved by the TRADOC Chief of Staff.

f. Goals. Goals are based upon TRADOC accidents only, and rates are computed in accordance with AR 385-40, except for the AMV rate which will be computed based upon miles driven versus population. Ensure accident reports correctly indicate on/off duty status for all military injuries.

(1) Military injuries (Class A-C):

(a) Measure. Military Disabling Injury (MDI) rate; the number of military injuries per 1000 population.

(b) Goal. A reduction of 5 percent from the installation, activity, or school's preceding 5-year average MDI rate.

(2) AMV accidents (Class A-D):

(a) Measure. AMV rate; the number of AMV accidents (Class A-D) per 1,000,000 miles driven.

(b) Goal. A reduction of 3 percent from the installation, activity, or school's preceding 5-year average AMV rate.

(3) Aviation accidents (Class A-C).

(a) Measure. Aviation accident rate; the number of Class A-C aircraft accidents per 100,000 flight hours.

(b) Goal. A reduction of 5 percent from the installation, activity, or school's preceding 5-year average Aviation Accident (Class A-C) rate.

5-4. TRADOC Safety Awards-Aviation.

a. DA and TRADOC Commander's Aviation Accident Prevention Awards are presented to selected TRADOC units for outstanding achievement in aircraft accident prevention during the previous fiscal year.

(1) Units will submit nominations to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048, NLT 15 December each year. Nomination format is at appendix F.

(2) The TRADOC Aviation Safety Officer reviews nominations and recommends selection to Director, Command Safety. AR 672-74 specifies DA awards criteria based upon the following:

(a) Unit Class A, B, and C aircraft accident experience (defined by AR 385-40 and UPDATES published by USASC).

(b) Annual accident prevention inspections/evaluations conducted by HQ, TRADOC.

(c) Compliance with aviation safety directives.

(d) Flying violation reports.

(e) Aviation maintenance management and quality control.

(f) Improvements in aircraft accident experience from previous years.

(3) TRADOC flying clubs may be nominated for this award based on the above requirements.

b. The Order of Daedalians Foundation Trophy for Aviation Safety.

(1) The Daedalian Foundation, a charitable, nonpolitical, nonprofit organization of the Order of Daedalians, sponsors the Brigadier General Carl I. Hutton Award and the LTG Allen M. Burdett Jr. Trophy.

(2) The Hutton Award is presented to the U.S. Army Aviation unit determined to have demonstrated outstanding professionalism and contributed to the

advancement of flight safety in Army aviation for the preceding year.

(3) The Burdett Award for aviation safety is presented to the aviation training base unit of flight or division level at Forts Eustis, Rucker, or Huachuca. Other non-TRADOC aviation training base units (e.g., Apache Training Brigade, Eastern/Western Army National Guard Aviation Training Site) may also participate.

(4) TRADOC aviation training units eligible for the Daedalian Burdett Flight Safety Award will not apply for the Daedalian Hutton Award.

(5) A permanent trophy provides recognition for winners of the award. It is appropriately inscribed and placed in the custody of the winning unit throughout the year following presentation.

(6) Nominations will be submitted to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048, NLT 15 December of each year.

(7) The winning unit will be selected by the Director, Command Safety, and coordinated with DCST.

(8) The Director, Command Safety will submit the following information to the National Adjutant, the Order of Daedalians, National Headquarters, Building 1635, Kelly Air Force Base, TX 78241-5000, prior to 15 January of each year:

(a) Official unit designation.

(b) Address and point of contact phone number.

(c) Sufficient descriptive information concerning the winning unit so the National Adjutant can draft a citation for the award.

(d) Information concerning the date, time, and location of the award ceremony.

(9) The installation/branch safety office responsible for the unit/organization currently possessing the trophy will ensure the trophy is forward to the winning unit. If mailed, the trophy will be placed in its original container. The winning unit will have the trophy plate appropriately engraved and will send the receipt for engraving to the National Adjutant for reimbursement.

(10) Winning the Daedalian Foundation Trophy Award requires the professionalism, dedication, and support of all unit personnel. Funds permitting, General Officer TRADOC representative will present the trophy to the winning unit.

5-5. TRADOC Certificate of Achievement in Safety.

a. The TRADOC Certificate of Achievement in Safety may be presented to an individual or organization that makes valid contributions to the TRADOC accident prevention effort.

b. Recipients may be Table of Organization and Equipment (TOE) or Table of Distribution and Allowances (TDA) detachments, company size units, battalions, or equivalent; brigades or equivalent; installations or activities; U.S. Army military personnel, DA employees, or personnel working with and under TRADOC operational control.

c. Nominations containing narrative description of achievements will be endorsed through the chain of command to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048.

5-6. Command Sergeant Major Safety Achievement Award.

a. Purpose. The TRADOC Command Sergeant Major Safety Award of Achievement was initiated to recognize the CSM Safety Action Council that contributed the most to the readiness of our Army and to the welfare of our soldiers.

b. General. This program provides a subjective means by which to recognize those programs that exceed the standard and contribute significantly to the TRADOC Force Protection effort.

c. Criteria.

(1) The award winner shall be selected by the TRADOC CSM and the TRADOC Director, Command Safety from the nominees submitted by TRADOC installations, activities, and schools.

(2) Criteria for nominations should include, but may not be limited to, the efforts of the installation, activity, or school CSM Safety Council; council meetings; special actions; CSM Safety Action Awards Program; and CSM safety stand-down days.

(3) Nominations may be submitted by any commander/commandant of a TRADOC installation, activity, or school. CSMS may also nominate subordinate organizations if sufficient evidence exists to demonstrate outstanding achievement in the field of force protection.

(4) Organizations may also be nominated by the TRADOC Safety and Occupational Health Evaluation Team in cases where it is clearly evident that a specific installation, activity, or school is deserving of special recognition for their extraordinary force protection efforts.

(5) To be considered, nominations must be received by the TRADOC CSM NLT 31 December each year.

d. Award. The award will consist of a silver loving cup inscribed with the name of the installation, activity, or school award winner, to be retained at TRADOC headquarters. An individual trophy will be presented to the winning CSM to take back to their home station.

e. Evaluation scheme. Award selection based upon comparison of nomination packets.

(1) Actual accident experience as depicted in accident rates will not be considered as the sole reason for award selection since the size, mission complexity, and relativity risk of operations of any two organizations may vary greatly.

(2) Award selection, although largely subjective, will consider the following elements:

(a) Effectiveness of CSM Safety Action Council.

(b) Positive effect of CSM Safety Action Council on organization's mission, effectiveness, and accident performance.

(c) New force protection initiatives or programs.

(d) Involvement of the junior noncommissioned officers in the Safety Action Council and Safety Action Council programs.

(3) If in the judgment of the TRADOC CSM and the Director, Command Safety, two organizations are equally deserving of the award, co-winners may be named.

5-7. Use of promotional items.

a. The use of incentive/promotional items can substantially contribute to accident prevention programs. AR 385-10 authorizes use of promotional items and ARs 600-8-22 and 672-20 authorize their purchase. The use of promotional items to recognize safe performance is encouraged.

b. Promotional items for safety must be distributed for valid reasons, for actions observed, and not with such frequency that they lose meaning.

c. The safety manager must approve purchase of these items.

d. Clearly identify all items as safety items via printing, logos, or other means.

e. Use small, inexpensive items to recognize day-to-day safe performance. These items should not exceed \$15.00 in cost. Examples are pencils, pens, gym bags, key chains, cups, etc. The safety manager must approve distribution schemes.

f. Use items costing less than \$50.00 to recognize significant contributions that have a positive effect on the safety of an organization. Examples are pen and pencil sets, jackets, calculators, etc. The safety manager must approve distribution of these items on a case-by-case basis.

g. Promotional items will not be recorded on property books. For this reason, installation/branch safety offices (IBSOs) must secure these items and establish internal controls.

h. Compliance with the above criteria will be an item of inspection during the annual safety program evaluation.

Chapter 6

Range Safety

6-1. Responsibilities.

a. Director, Command Safety, in conjunction with branch proponent, will—

(1) Evaluate worldwide Army range accident data to identify range hazards.

(2) Develop safety lessons learned.

(3) Assess the adequacy of range safety standards and training safety criteria; and develop countermeasures.

(4) Assist using units/agencies in risk management of range and live-fire operations.

b. Installation commanders will execute the applicable safety responsibilities in ARs 75-1, 210-21, 385-10, 385-62, 385-63, and TRADOC Reg 700-2.

c. Installation range control officers will—

(1) Be responsible for the overall operation of the range control organization in its implementation of the range safety program.

(2) Maintain coordination with the IBSO on all safety matters relating to range and live-fire operations.

(3) Develop a range safety directive, and ensure all ranges have SOPs.

(4) Develop and implement an on-post and off-post range safety educational program in coordination with the IBSM, public affairs officer (PAO), Quality Assurance Specialist Ammunition Surveillance (QASAS), provost marshal, and local Explosive Ordnance Disposal (EOD) unit commander.

(5) Ensure selected range control personnel receive range safety training. At least one member of the range control organization should be a graduate of the Army Range Safety Course. When unexploded ordnance (UXO) recognition training program is implemented, at least one member of the range control organization, and other appropriate personnel, should be UXO recognition qualified through training provided by EOD.

d. IBSM has oversight responsibility for all range safety matters. IBSMs will—

(1) Provide staff oversight on integrating safety and safe weapons handling into the local range program.

(2) Monitor cadre/staff instruction to ensure all instructors receive training in range hazards before teaching students or operating a range.

(3) Review and comment on new and revised installation range safety directives and SOPs.

(4) Monitor UXO training, developed and

conducted by the local EOD unit commander in coordination with appropriate staff agencies (e.g., range manager, provost marshal, director of public works (DPW)).

(5) Ensure safety and range professionals receive range safety education. At least one member of the IBSO will be a graduate of the Army Range Safety Course. When UXO recognition training program is implemented, at least one member of the IBSO should be UXO recognition qualified through training provided by EOD.

(6) Inspect range facilities and live-fire training areas IAW AR 385-10, paragraph 4-1a(1). Recommend closure of ranges/training areas when warranted by safety considerations.

(7) Assist in safety planning and review of ranges designated for construction, modification, rehabilitation, or changes in use.

(8) Assist range control officer and PAO in developing and implementing an on- and off-post range safety educational program.

(9) Review and comment on deviations to AR 385-63 before submission to approving authority. Ensure each deviation contains risk assessment.

(10) Ensure a copy of all locally approved deviations are forwarded to HQ TRADOC, ATTN: ATCS-S within thirty (30) days of approval.

6-2. Accident reporting. Report any accident caused by firing of weapons system(s) that would indicate inadequacy of the range safety provision of this regulation and ARs 385-62 and 385-63, to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048 IAW paragraph 2-4, above (RCS CSOCS-308).

6-3. Residual risk acceptance approval authority. Range/live fire deviations may be approved IAW paragraph 1-5c.

Chapter 7

Explosives Safety

7-1. Responsibilities.

a. Director, Command Safety will—

(1) Serve as the TRADOC point of contact to the U.S. Army Technical Center for Explosive Safety (USATCES).

(2) Serve as the alternate member of the DA Explosives Safety Council (DAESC).

b. Commanders, TRADOC installations will—

(1) Execute the applicable responsibilities in ARs 75-1, 385-10, 385-61, 385-62, 385-63, 385-64, TRADOC Reg 350-30 and TRADOC Reg 700-2.

(2) Ensure explosive safety program complies with provisions of AR 385-64 and DA Pam 385-64.

(3) Develop and implement appropriate safety procedures for receiving, storing, issuing, handling, transporting, and disposing of ammunition.

(4) Ensure knowledgeable and qualified safety personnel review installation site plans, safety submissions and facilities designs before submission to HQ, TRADOC.

(5) Ensure requests for waivers, exemptions, and certificates of compelling reason are submitted when compliance with explosive safety standards in AR 385-64, DA Pam 385-64, and this regulation (as appropriate) cannot be achieved. Requests for waiver/exemption requires IBSO's to determine the hazard involved, identify exposure and actions taken or program to correct hazard/ exposure. Prepare waiver/exemption IAW appendix G of this regulation. Submit requests for waivers/exemptions to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048.

(6) Ensure established quantity-distance (Q-D) arcs on installation master planning maps.

(7) Ensure explosive site plans and/or explosive storage license are submitted IAW AR 385-64, chapter 6.

(8) Approve pyrotechnic displays and use of explosives in connection with public demonstrations, exhibitions, and celebrations.

(9) Ensure ammunition and explosive accidents/ mishaps are reported IAW AR 385-40 and appendix C of this regulation.

(10) Request guidance from Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048 for circumstances not specifically addressed in this regulation or applicable AR. Submit a detailed map (or aerial photo) of the ammunition and explosives operations site and surrounding area. Include a narrative description of the conditions requiring resolution.

(11) Ensure Ordnance and Explosives (OE) site safety submissions are submitted for the removal of OE when land known or suspected to contain OE hazards before lease, transfer out of DoD or disposal.

c. Commander, U.S. Army Ordnance Missile and Munitions Center and School (USAOMMCS) will appoint an individual in the grade of O-6 or above to serve as principal TRADOC member of DAESC.

d. IBSMs will—

(1) Monitor all installation operations for compliance with explosive safety standards.

(2) Assist units in determining Q-D requirements with assistance from ammunition supply point (ASP) personnel.

(3) Evaluate and make recommendations for approval of requests for explosives safety waivers and exemptions.

(4) Review explosives safety actions before forwarding to HQ TRADOC, ATCS-S to ensure operational needs and safety implications are clearly defined and projected requirements are stated.

(5) Inspect ASP facilities and operations for special hazard IAW AR 385-10, paragraph 4-1a(1).

(6) Ensure arms rooms are inspected by personnel familiar with applicable explosive safety requirements (e.g., unit collateral duty safety officer).

(7) Assist tenant units and site commanders regarding explosives safety program requirements.

(8) Review QASAS magazine inspection reports. Track abatement actions on explosives safety deficiencies.

(9) Participate in preparation of site plans/safety submissions for explosives operations and facilities. After review, forward to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048, at least 90 days prior to desired construction start date or modification of facilities.

(10) Maintain records of annual review of waivers/exemptions approved by installation commander IAW AR 25-400-2, The Modern Army Recordkeeping System (MARKS).

(11) Ensure safety professionals attend an approved explosives safety course as required to support installation/tenant unit missions. At least one member of the IBSO should be a course graduate. Approved explosives courses are available from U.S. Army Defense Ammunition Center (USADAC).

(12) Evaluate and make recommendations for approval of use of explosives and pyrotechnics in public demonstrations, exhibitions, and celebrations.

(13) Submit an explosive accident report on DA Form 285 or 285-AB-R to appropriate agencies based on criteria set forth in AR 385-40, paragraph 2-8, and appendix C of this regulation. Provide a copy of all explosive accidents and mishaps reports to Command Safety Office, ATTN: ATCS-S.

e. Commanders of ammunition storage sites will—

(1) Coordinate with the IBSO, conditions that require DoD Explosives Safety Board (DDESB) site plans/safety submission.

(2) Initiate and forward requests for waivers/exemptions to IBSO.

(3) Provide the following items for review during explosives safety inspections:

(a) A complete inventory by storage facility showing Department of Defense Ammunition Code (DODAC), nomenclature, quantity, and total net explosives weight.

(b) The latest lightning protection system inspection report furnished by Directorate of Public Works (DPW).

(c) Copy of work orders submitted for corrections of safety deficiencies.

7-2. Use of explosives and pyrotechnics in public demonstrations, exhibitions, and celebrations.

a. Use of pyrotechnic displays and/or explosives in connection with public demonstrations, exhibitions, and celebrations requires HQ, TRADOC (ATCS-S) approval. Compliance is required for all applicable laws and regulations. Prior to forwarding to HQ TRADOC (ATCS-S) for approval, the IBSM will coordinate the action with staff judge advocate (SJA) and PAO. Appendix E outlines procedures for evaluating use of explosives and pyrotechnics in public demonstrations.

b. Participation of personnel. DA policy is that U.S. Army military or civilian personnel will not handle, transport, store, set up, fire, detonate, or police up military and/or commercial explosives or pyrotechnics for public demonstrations, exhibitions, and celebrations conducted by the public. Use of military explosives and/or pyrotechnics by U.S. Army military or civilian personnel to include handling, transporting, storing, setting up, firing, detonating, or policing up, on other than military property, even if such events are conducted by the military, is discouraged. Use of antique weapons not routinely fired is prohibited, including their use for saluting. Other restrictions contained herein do not apply to routine saluting. Routine saluting will be interpreted as rendering of explosive salutes using artillery in conjunction with formal military events following military protocol on military property. Saluting at public events on other than military property should only be granted in those rare instances when such an exception is clearly warranted.

c. Installation commanders may approve Army personnel to handle or activate certain items involved in contractor demonstrations. Approval will be based upon requirements in appendix E.

d. There is no requirement for HQ TRADOC approval of civilian contractor (defense contractor) use of explosive or pyrotechnics in connection with public demonstrations, exhibits, and celebrations.

7-3. Transportation and field/temporary storage of ammunition.

a. Observe special requirements for transportation of explosives as specified in AR 385-64, DoD 4500.9-R, part II, Department of Transportation Regulations, and other applicable Army, Federal, state, and local regulations, concerning mechanical condition, refueling, placarding, and marking of vehicles.

b. Quality Distance (Q-D) requirements apply to field/temporary storage of ammunition and explosives.

7-4. Unit arms room.

a. Ammunition storage in unit arms rooms requires an approved explosive storage license.

b. Commanders shall store only a limited quantity of ammunition required for operational necessity.

c. Munitions items authorized for storage in unit arms rooms are limited to Hazard Class (HD) (04) 1.2, HD 1.3 and HD 1.4 without regard to quantity distance requirements. However, prior to a unit storing ammunition in an arms room, the installation commander will approve the risk assessment that justifies the storage based on operational necessity and safety considerations.

d. Ammunition must be packed in approved Department of Transportation (DOT) containers.

e. Training ammunition shall be physically separated from operational necessity ammunition and ammunition stacks clearly marked as 'Training Ammunition.'

7-5. Site plans and safety submissions.

a. Prepare site plans and safety submissions IAW AR 385-64.

b. Forward original and two complete copies of site plan/safety submissions through channels to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048 for submission to Director, U.S. Army Technical Center for Explosives Safety, ATTN: SIOAC-EST, Savanna, IL 61074-9639.

7-6. Requests for waivers, exemptions and certificates of compelling reason.

a. Prepare request for waiver, exemption, or certificate of compelling reason (CCR) on DA Form 7319-R IAW AR 385-64 and appendix G of this regulation.

b. Request waivers, exemptions or certificate of compelling reason after every reasonable and prudent effort has been made to eliminate the nonstandard condition. Submit all violations of on-post and off-post explosives Q-D safety criteria in a single, consolidated request. Failure to comply with restrictions, or incidents arising from operations or conditions, covered by the approved waiver, invalidates the waiver until reinstated by the appropriate waiver authority. Advise HQ TRADOC (ATCS-S) when a waiver is canceled due to corrective action being taken before the waiver expiration date. Waivers expire at the close of business of the expiration date specified on the waiver request. Renewal requests for waivers will show that all practicable means to correct conditions of original waiver were exhausted.

c. Approval authority for waiver/exemption requests will be IAW AR 385-64. All locally approved waiver/exemption requests will be forwarded to HQ TRADOC, ATTN: ATCS-S within thirty (30) days.

d. Waivers, exemptions or CCR are not authorized for ammunition and explosives storage deemed as

hazardous waste munitions. Hazardous waste munitions storage and transport shall be managed IAW DOD 6055.9-STD, chapter 14.

7-7. Licensing of explosives storage facilities.

a. All ammunition and explosives stored in licensed facilities and in quantities, which do not exceed amounts, specified on the explosives storage license.

b. Do not license ammunition and explosives facilities, which are not in compliance with explosives safety standards (AR 385-64/DA Pam 385-64).

c. Consolidation of sites or relocation of ammunition and explosives from one licensed facility to another requires prior verification of the authorized net explosive weight (storage capacity) of the gaining facility to ensure increased quantities can be accommodated without violating licensed limits.

d. Where consolidation of ammunition and explosives is necessary or the need to increase storage capacity requires the use of storage buildings, magazines, open pads and/or hardstands not previously licensed, an updated site plan safety submission will be submitted through Command Safety Office for approval IAW AR 385-64 and this regulation.

e. Use TRADOC Form 385-2-4-R-E, Quantity Distance Verification, to list maximum allowable explosives limits (in pounds) by Hazard Class/Division for each explosives facility. Base licensing on either storage capacity, or existing internal or external exposures to be protected from accidental explosions within an explosives site, whichever is more stringent. See appendix K for instructions on completing form. Additional information on completion of form can be found in United States Army Technical Center for Explosives Safety (USATCES) Pam 385-02.

f. Actual distances should always meet or exceed required distances.

g. A complete explosives storage license consists of:

(1) Quantity Distance Verification, TRADOC Form 385-2-4-R-E, signed and dated.

(2) A site map (or aerial photo) indicating each facility by identification number/designation and accurate distances to the determining factors for each specific facility. Draw a QD arc IBD around the entire ammunition and explosives storage site.

NOTE: Do not arbitrarily measure distances from maps. Confirm by actual measurement.

h. Annually, IBSM's will verify explosive storage licenses for accuracy. Renewal is contingent upon an annual inspection of each ammunition and explosives facility. As a minimum, the inspection must encompass—

(1) On site physical inspection to verify what is

stored as compared to the explosives storage license authorization.

(2) Prompt correction of any net explosive weight overages (even of a temporary nature).

(3) Prompt correction of storage compatibility violations.

(4) Adequacy of earthen cover on magazines.

(5) Inspection of lightning protection systems.

(6) Verification of quantity-distance requirements, including an inspection of areas within the quantity-distance arc for possible encroachments.

i. Explosive storage licenses are permanent documents with no expiration date. However, a new storage license will be issued and the old one canceled, if encroachment changes the determination factor or Q-D standard requiring license alteration. Keep a validated copy of the complete explosives storage license at the ammunition and explosives storage site. IBSO maintain the original copy.

j. When circumstances arise that are not specifically defined in these instructions, request guidance from HQ TRADOC, ATTN: ATCS-S.

Chapter 8

Motor Vehicle Accident Prevention Program

8-1. General. This chapter establishes requirements for the TRADOC Motor Vehicle Accident Prevention Program. Motor vehicle accidents are the number one killer of soldiers. Driver error causes most motor vehicle accidents. Proper selection, training, and supervision of drivers will help to prevent these errors.

8-2. Responsibilities.

a. Commanders, TRADOC installations will—

(1) Comply with requirements of AR 385-55 and AR 600-55.

(2) Develop and prescribe local procedures for the safe operation of motor vehicles.

(3) Develop and execute training, education, and motivation programs for motor vehicle operation.

b. IBSM's will provide staff oversight of the installation Motor Vehicle Accident Prevention Program.

c. Military Police (MP) will collect, analyze, and evaluate motor vehicle and accident data to identify where accident prevention efforts must be focused.

8-3. Driver education.

a. All Army personnel (Active Army, U.S. Army Reserve, Army National Guard) and civilian employees required to drive AMVs will be given at least 4 hours of

classroom instruction in accident avoidance such as National Safety Council, Defensive Driver Course (DDC). The installation may use any recognized national/state program or self-developed course to meet this requirement.

b. Every 4 years thereafter, as part of the license renewal process, provide a 4-hour refresher course to meet the requirements of AR 385-55, paragraph B-4. This may be a self-developed course provided to units for presentation.

c. Due to lack of standardization of accident avoidance training, attendance at the entire Army Driver Improvement Program (ADIP) authorizes RC personnel to operate AMVs on TRADOC installations.

8-4. Motorcycle safety. All personnel, while operating or riding on a motorcycle, moped, or three- or four-wheeled all-terrain vehicle (ATV) on an Army installation or on government business, will wear proper personal protective equipment and have completed an Army approved motorcycle safety course.

8-5. Bicycle safety. All personnel, while operating or riding on a bicycle within the boundaries of TRADOC installations will wear an approved (i.e., American National Standards Institute (ANSI) or the Snell Memorial foundation) bicycle helmet. A bicycle safety helmet will be worn by all personnel (including dependents) who ride bicycles on DoD installations.

8-6. Troop safety.

a. The speed limit on all TRADOC installations when approaching or passing a troop formation from either the front or rear is 10 miles per hour (MPH). Display adequate regulatory signage at all vehicle entrances to post, in concentrated troop areas (e.g., company areas, billeting areas), and along all routes of troop march.

b. Motorists will not jeopardize the safety of troop formations. If the potential exists where a vehicle operator is in doubt of safely passing a formation, the vehicle operator will stop and await directions from the person in charge of the formation.

c. Commanders of TRADOC installations will establish designated routes for organized physical training (PT) formations that will limit exposure of troops to motor vehicle traffic.

8-7. Control of stragglers.

a. Personnel unable to remain with the formation (i.e., stragglers) will immediately go to the extreme right side/shoulder of the road and, if possible, continue in the direction of the formation.

b. Safeguard stragglers by one or both of the following methods:

(1) Use cadre, with appropriate safety equipment (e.g., reflective vests) to follow stragglers.

(2) Use a trail vehicle with flashing lights to pick up/follow stragglers.

c. Stragglers will not remain in the roadway, thereby placing themselves in danger of being struck by vehicles.

8-8. Traffic safety clothing. Use traffic safety clothing identified in table 8-1 or equivalent alternatives.

a. Position diagram for distinctive marking of marching troops is at figure 8-1. As a minimum, traffic and column guards will wear reflective vests (marked with an asterisk (*)) during all road marches. Commanders will determine if additional traffic safety clothing is required. Equip marching troops (marked by a plus (+) sign) with reflective clothing for movement on high speed roads. During darkness or inclement weather, front and rear guards will march 30 meters in front (flashlight beam directed forward) and to the rear (flashlight beam directed rearward) of each formation.

b. Military police personnel will wear the safety vest and sleevelet.

8-9. Privately Owned Vehicle (POV) Task Force.

a. A POV Task Force will be convened at HQ TRADOC (ATCS-S) and all TRADOC installations at least semiannually to analyze POV accident trends, identify and review local facility traffic problems, and/or establish special safety campaigns for specific high POV accident periods.

b. Members of the POV Task Force/Traffic Review Board will consist of, but not be limited to, the following:

(1) Traffic Engineer (DPW).

Table 8-1. Traffic Safety Clothing

LINE ITEM NO.	FSN	ITEM DESCRIPTION
Y00950	8415-00-177-4974	Vest RV-1
B24512	8465-00-177-4975	Leg Band RLB-1
B24652	8465-00-177-4976	Sleevelet
B23462	8465-00-177-4977	Arm Band RAB-1
B24402	8415-00-177-4978	Helmet Band RHB-1

- (2) Provost Marshal.
- (3) Safety Director/Manager (chairperson).
- (4) Public Affairs Officer.
- (5) Staff Judge Advocate.
- (6) Alcohol/drug officer.

c. Invite local law enforcement agencies to attend and participate.

d. Forward POV task force recommendations to installation commanders for review and possible adoption.

Chapter 9

Emergency, Disaster Preparedness, and Pre-accident Planning

9-1. General. Pre-planned, coordinated and tested emergency action, disaster preparedness, and pre-accident plans are proven methods by which to minimize loss of life and property damage due to natural or man-made disaster or accident.

9-2. Responsibilities.

a. Commanders, TRADOC installations will—

- (1) Develop and maintain emergency action,

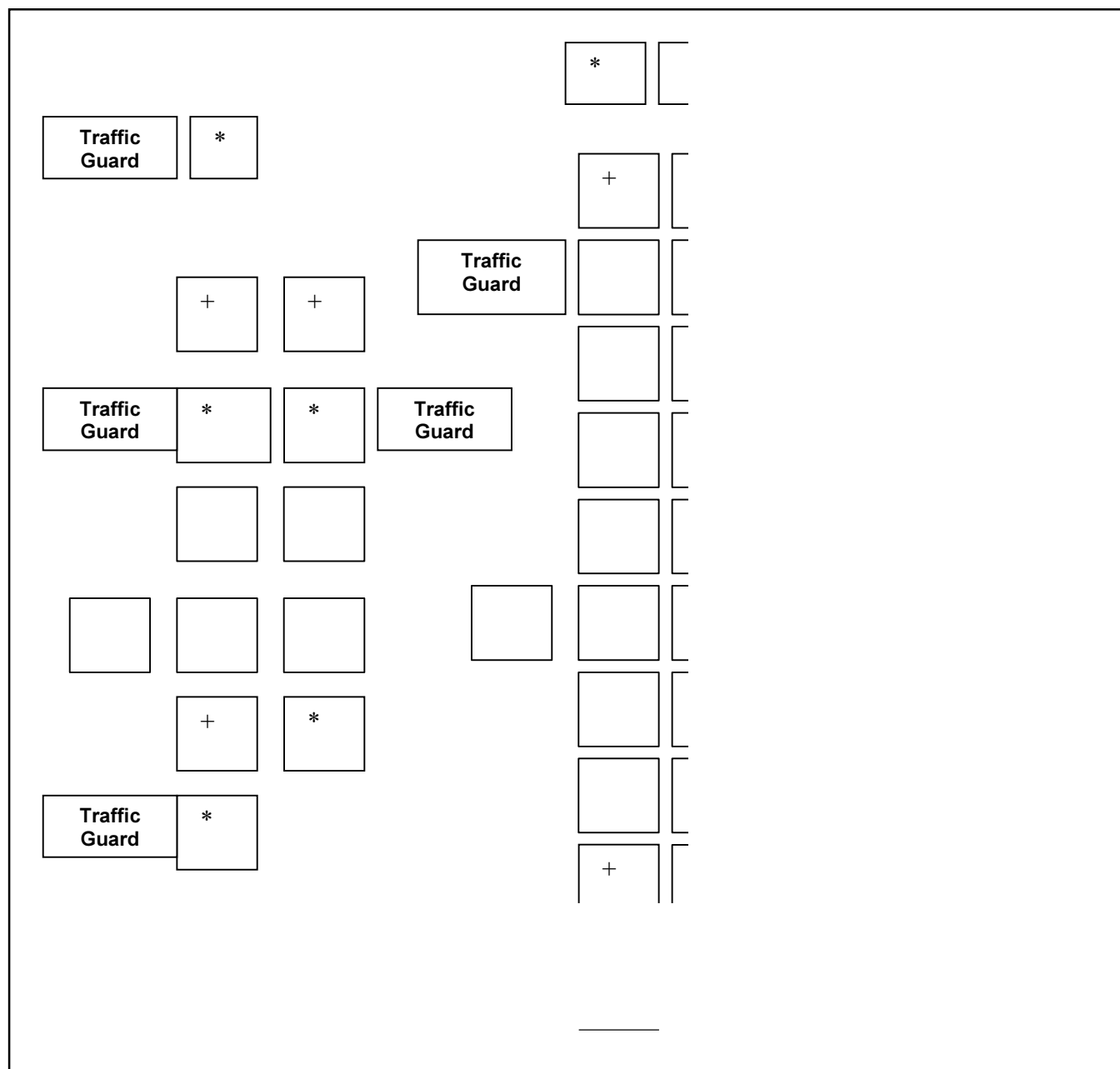


Figure 8-1. Position diagram for distinctive marking for marching troops

disaster preparedness, and pre-accident plans as appropriate to their installation and mission.

(2) Provide adequate resources and support to implement emergency action, disaster preparedness, and pre-accident plans.

(3) Appoint an Installation Emergency Preparedness Officer to coordinate, maintain, and test emergency action, disaster preparedness, and pre-accident plans.

b. Installation Emergency Preparedness Officer will—

(1) Direct and coordinate development, publication, and maintenance of installation emergency action, disaster preparedness, and pre-accident plans.

(2) Ensure all participants have a current copy of each plan for which they are identified as responders.

(3) Ensure annual evaluations and testing of each plan is accomplished.

(4) Ensure coordination with appropriate civil agencies and civil governments to effect mutual aid agreements.

c. IBSMs will—

(1) Develop, coordinate, publish, and test installation pre-accident plans for both ground and aviation accidents.

(2) Assist the Installation Disaster Preparedness Officer in development, coordination, and maintenance of emergency action and disaster preparedness plans.

d. Installation Fire Marshal will—

(1) Develop, coordinate, publish, and test installation HAZMAT response plan.

(2) Assist the Installation Disaster Preparedness Officer in development, coordination, and maintenance of emergency action and disaster preparedness plans.

(3) Assist commanders, directors, and supervisors in developing and testing fire prevention and emergency evacuation plans.

e. Commanders, directors, and supervisors will ensure that fire prevention and emergency evacuation plans are developed, published, and tested for all buildings under their control.

9-3. Reporting procedures.

a. Installation commanders will develop policies/procedures to ensure timely notification of the TRADOC EOC and the Command Safety Office IAW the provisions of paragraphs 1-4g(5), 2-2a, and 3-2e(2) of this regulation.

b. All recordable industrial chemical spills/incidents or radiation exposure incidents will be reported immediately to HQ TRADOC, ATCS-S (Command Safety Office).

Chapter 10 Water Safety Responsibilities.

a. Director, Command Safety will evaluate the TRADOC water safety program.

b. Commanders, TRADOC installations will—

(1) Implement policies and procedures contained in AR 385-15.

(2) Identify military non-swimmers and provide swimming/water survival training.

(3) Establish directives for safety procedures for tactical water operations (see appendix H).

(4) Establish directives for safety procedures for recreational water activities (see appendix I).

c. IBSMs will—

(1) Provide staff oversight of the installation water safety program.

(2) Monitor appropriate cadre/staff instruction to ensure all instructors receive training in water operations and hazards before teaching students.

(3) Review and comment on new and revised installation water safety directives.

(4) Monitor water operations and water safety training developed and conducted on the installation and unit training conducted off the installation.

Chapter 11 Ionizing and Nonionizing Radiation Safety Program

11-1. General. The Commander, TRADOC requires the use of resources, methods, procedures, and equipment which will protect soldiers, the general public, and the environment, from ionizing and nonionizing radiation hazards as low as reasonably achievable (ALARA), and at least equal to that required by Code of Federal Regulations (CFR), Title 10, and Nuclear Regulatory Commission (NRC) license requirements and Army regulations.

11-2. Responsibilities.

a. Director of TRADOC Command Safety will—

(1) Establish a Radioactive Material (RAM) Command Post (RMCP).

(2) Ensure each TRADOC installation that handles, uses, or has radioactive commodities in their possession, implements an effective radiation safety program that complies with the requirements of federal standards and Army regulations.

(3) Appoint (in writing) a TRADOC Radiation Safety Staff Officer (RSSO) and alternate RSSO to

manage the RMCP and oversee TRADOC installations radiation safety programs.

b. The TRADOC RSSO will—

(1) Manage the RMCP and oversee operations of TRADOC installations radiation safety programs.

(2) Review and forward applications for Nuclear Regulatory Commission (NRC) licenses/license renewals to the NRC. Review and approve Army Radiation Authorizations (ARA) IAW AR 11-9.

(3) Report recordable TRADOC radiological incidents to the TRADOC Chief of Staff, and the commodities licensee or NRC, as applicable. Maintain copies of all correspondence involving TRADOC radiological incidents and accidents.

(4) Review and forward written radiological incident investigation reports to the licensee.

(5) Maintain a serialized/user inventory of TRADOC MC-1 instruments and provide an updated copy of the inventory to the licensee semiannually.

c. IBSMs will—

(1) Oversee their installations radiation safety program and provide recommendations on safety and health issues related to radiological incidents.

(2) Review applications for ARAs for accuracy and completeness. Forward ARAs to Commander, U.S. Army Training and Doctrine Command, ATTN: ATCS-S, Fort Monroe, VA 23651-1048.

d. Commanders, TRADOC installations will—

(1) Implement (in writing) an ionizing and nonionizing radiation safety program consistent with 10 CFR 20.1101, and this regulation. The program will also include procedures for emergency response and reporting procedures for radiation incidents and over-exposures.

(2) Appoint (in writing) a Radiation Safety Officer (RSO) and alternate RSO to manage and operate installations radiation safety program

(3) Provide resources, facilities, training, equipment, and support staff commensurate with the extent of their assigned responsibilities, and IAW NRC license requirements.

(4) Appoint (in writing) an individual to serve as record custodian to be responsible for preparing and maintaining ionizing radiation occupational exposure records, when applicable.

(5) Implement a Radiation Safety Committee (RSC) IAW AR 11-9.

(6) Ensure that unit commanders appoint (in writing) RSOs to perform radiological operations on behalf of the unit.

(7) Ensure that unit commanders provide resources, training, equipment, and support commensurate with the extent of the RSOs assigned responsibilities.

(8) Ensure that unit RSOs comply with the requirements of the installation RSO, federal standards, and Army regulations.

e. RSO will—

(1) Manage the installations radiation safety program including the ionizing and nonionizing radiological operations conducted by regular Army, Reserves and National Guard units on the TRADOC installations.

(2) Instruct radiation handlers/users in safe working conditions and operating procedures IAW applicable regulations and directives.

(3) Obtain (in writing), approval of the Radioactive Material Control Point (RMCP) before transferring individually controlled items; e.g., radiac calibrator sets and soil moisture density testers.

NOTE: Controlled items, other than individually controlled items, may be transferred without approval of the RMCP.

(4) Send to the RMCP (in writing) all changes of individually controlled item operators, as they occur.

(5) Ensure non-Army agencies (including civilian contractors) have valid Army Radiation Permits (ARPs), IAW AR 11-9, before allowing them to bring radioactive materials or equipment containing radioactive materials onto the installation.

NOTE: To obtain an ARP, the contractor must have either a valid NRC license, or a valid agreement state license with a current NRC Form 241.

(6) Ensure transaction reports on M8A1's, CAM's, and MC-1's are submitted to Department of Defense Radiation Testing and Tracking System (DODRATTS) for inventory losses, receipts, shipments, wipe tests, repairs, and demilitarization.

(7) Ensure required documents are posted on the way to and from locations to which the documents apply; e.g., NRC Form 3; Section 206 of Energy Reorganization Act of 1974; applicable regulations, licenses, and SOPs; emergency telephone numbers; and local NRC or United States Army Center for Health Promotion and Preventive Medicine (USACHPPM) violations (if any).

(8) Prepare Army radiation permits IAW AR 11-9 and copy furnish the TRADOC RMCP.

(9) Maintain copies of NRC licenses, ARAs, and ARPs for radiological equipment/items used on the installation.

f. Unit commanders will—

(1) Develop and implement a written unit level

radiation safety program or SOP that describes unit's radiological mission, individual responsibilities, safety precautions, radiological storage, transfer of radiation equipment, emergency response and reporting procedures.

(2) Appoint (in writing) a local radiation safety officer (LRSO) and alternate LRSOs to manage and carry out the unit's radiological mission.

(3) Provide required resources, training, and equipment for handlers/users of licensed radioactive devices.

(4) Perform required wipe tests on radiological items in accordance with applicable license requirement, regulations and directives and forward samples to the RSO for analysis.

(5) Perform quarterly wipe tests on the interior surfaces of indoor storage areas and conex containers used for storing items containing tritium and forward samples to the installation RSO for analysis.

(6) Document all radiological training, surveys, and wipe tests.

(7) Ensure that every soldier in the unit is provided awareness training to inform them of the hazards associated with ionizing and nonionizing equipment used within the Army.

(8) Ensure all soldiers within the unit know that they are to immediately report to the RSO any broken, damaged, or malfunctioning radiological item.

NOTE: When defective or broken radiological devices are discovered the handler/user will secure the area and ensure that the item is not disturbed until the RSO arrives, or specific instructions are received from the RSO.

(9) Maintain a current inventory of all ionizing and nonionizing equipment in the unit's possession. Provide the RSO a copy of the inventory at least annually.

11-3. Destructive testing. Destructive testing of equipment containing radioactive material is prohibited unless the radioactive components (muzzle reference sensors, radium or tritium dials and gages, night vision systems, armor plating, etc.) are first removed or a specific NRC license is obtained permitting such testing.

11-4. Radioactive material licensing. The acceptance, storage, or use of radioactive material or equipment/items containing radioactive material, not licensed by the NRC or an Agreement State License with a current NRC Form 241 and ARP, is prohibited. Unauthorized radioactive materials, equipment or items containing radioactive material discovered on the installation will be immediately reported, by telephone

or electronic mail, to the TRADOC RMCP. Secure the radioactive material or equipment until instructions regarding corrective action are received.

11-5. Radiation incident/accident reporting.

Immediately report, by telephone, any occurring radiation incident or accident involving radioactive material to the TRADOC RMCP, (757) 727-3930 or DSN 680-3930. After completing a full investigation, send a written report, within 10 days, through Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048, to the commodity licensee.

Chapter 12 Tactical Safety

12-1. General. Accidents and injuries increase during maneuver and field training exercises (FTX). In this environment it is essential that commanders and leaders at all levels routinely use the risk management process as an integral part of the military decision making process. FM 100-14 and FM 101-5 provide specific guidance on how to accomplish this within the operational arena.

12-2. Responsibilities.

a. Commanders, TRADOC installations will—

(1) Review safety requirements contained in this regulation during the planning and execution phases of FTXs.

(2) Make risk management a fully integrated part of planning and executing operational missions and not an add-on to the decision making process.

(3) Provide operation plans for major exercises to the designated safety officer for review during planning stages prior to deployment.

(4) Evaluate risks in all planned training exercises involving TRADOC units and exercises on TRADOC installations (including those by non-TRADOC units) and avoid unnecessary risk. Manage risk associated with these activities IAW FM 100-14 and FM 101-5.

(5) Review training plans from non-TRADOC units training on TRADOC installations, to include risk assessments.

b. IBSMs will review plans and risk assessments for major exercises (separate brigade or higher) and provide appropriate recommendations and support during the execution of the exercise.

c. The principles, procedures, and responsibilities to successfully apply the risk management process can be found in FM 100-14 and FM 101-5.

Appendix A References

Section I Required Publications

DOD 4500.9-R, part II
Defense Transportation Regulation (Cargo Movement)

DODI 6050.5
DoD Hazard Communication Program

DOD 6055.9-STD
DoD Ammunition and Explosives Safety Standards

AR 11-9
The Army Radiation Safety Program

AR 25-400-2
The Modern Army Recordkeeping System (MARKS)

AR 50-6
Chemical Surety

AR 75-1
Malfunctions Involving Ammunition and Explosives

AR 95-1
Flight Regulations

AR 190-40
Serious Incident Report

AR 210-21
Army Ranges and Training Land Program

AR 335-15
Management Information Control System

AR 385-10
The Army Safety Program

AR 385-15
Water Safety

AR 385-16
System Safety Engineering and Management

AR 385-40
Accident Reporting and Records

AR 385-55
Prevention of Motor Vehicle Accidents

AR 385-61
The Army Chemical Agents Safety Program

AR 385-63
Policies and Procedures for Firing Ammunition for
Training, Target Practice and Combat

AR 385-64
U.S. Army Explosives Safety Program

AR 385-95
Army Aviation Accident Prevention

AR 420-90
Fire and Emergency Services

AR 600-8-22
Military Awards

AR 600-55
The Army Driver and Operator Standardization Program
(Selection, Training, Testing, and Licensing)

AR 672-20
Incentive Awards

AR 672-74
Army Accident Prevention Awards Program

AR 690-950
Career Management

DA Pam 385-40
Army Accident Investigation and Reporting

DA Pam 385-64
DoD Ammunition and Explosives Safety Standards

USATCES Pam 385-02
Site and General Construction Plan Developer's Guide
(This publication is available on the Defense Ammunition
Center homepage at [http://www.dac.army.mil/es/est/
spguide.html](http://www.dac.army.mil/es/est/spguide.html))

FM 90-13
River-Crossing Operations

FM 100-14
Risk Management

FM 101-5
Staff Organization and Operations

TC 1-210
Commander's Guide to the Aircrew Training Manual

TM 5-662
Swimming Pool Operations and Maintenance

TM 5-811-1
Electric Power Supply and Distribution

TB MED 575
Swimming Pools and Bathing Facilities

TRADOC Reg 350-30
Training and Certification Program for Personnel
Working in Ammunition Operations

TRADOC Reg 700-2
Ammunition

Title 10 CFR 20
Standards for Protection Against Radiation

Title 33 CFR 183
Boats and Associated Equipment

Section II Related Publications

DODI 6050.5-H
DoD Hazardous Chemical Warning Labeling System

AR 15-6
Procedures for Investigating Officers and Boards of Officers

AR 40-5
Preventive Medicine

AR 200-1
Environmental Protection and Enhancement

AR 215-1
Morale, Welfare, and Recreation Activities and Nonappropriated Fund Instrumentalities

AR 385-62
Regulations for Firing Guided Missiles and Heavy Rockets for Training, Target Practice and Combat

AR 420-49
Utility Services

AR 700-141
Hazardous Materials Information System (HMIS)

FM 9-43-2
Recovery and Battlefield Damage Assessment and Repair

FM 10-67-1
Concepts and Equipment of Petroleum Operations

FM 21-16
Unexploded Ordnance (UXO) Procedures

FM 21-305
Manual for the Wheeled Vehicle Driver

FM 21-306
Manual for the Track Combat Vehicle Driver

FM 100-5
Operations

TC 5-210
Military Float Bridging Equipment

Title 10 CFR 19
Notices, Instructions, and Reports to Workers: Inspection and Investigations

Title 29 CFR 1910
Occupational Safety and Health Standards

Title 29 CFR 1926.59
Hazard Communication

Section III Referenced Forms

DA Form 285
U.S. Army Accident Report

DA Form 285-AB-R
U.S. Abbreviated Ground Accident Report

DA Form 348
Equipment Operator's Qualification Record (Except Aircraft)

DA Form 2397-R
Technical Report of U.S. Army Aircraft Accident

DA Form 7305-R
Telephonic Notification of Aviation Accident/Incident

DA Form 7306-R
Worksheet for Telephonic Notification of Ground Accident

DA Form 7319-R
Explosives Waiver/Exemption Request

DD Form 2324
DoD Fire Incident Report

NRC Form 3
Notice to Employees (This form is available on the US Nuclear Regulatory Commission homepage at: <http://www.nrc.gov/NRC/FORMS/form3.html>)

NRC Form 241
Report of Proposed Activities in Non-Agreement States (This form is available on the US Nuclear Regulatory Commission Office of State Programs homepage at: <http://www.hsrdo.ornl.gov/nrc/special/fr241.pdf>)

OF 346
U.S. Government Motor Vehicle Operator's Identification Card

SF 91
Motor Vehicle Accident Report

Section IV Prescribed Forms

TRADOC Form 385-2-3-R-E
TRADOC Telephonic Serious Accident Report (RCS ATOS-2)

TRADOC Form 385-2-4-R-E
TRADOC Quantity Distance Verification

TRADOC Form 385-2-5-R-E
Record of Injury

TRADOC Form 385-2-6-R-E
No Loss Fire Incident Report

Appendix B TRADOC Collateral Duty Safety Officer (CDSO)/NCO Training Program

B-1. Role and Responsibilities of Collateral Duty Safety Officer/NCO. The use of CDSOs is mandated as a means to increase the overall scope of the

safety program, providing commanders and supervisors at all levels with an organic safety resource to assist in the oversight of their safety program. Law and regulation, however, both define specific requirements for selection and training of CDSOs and place limits on their safety activities. CDSOs augment, but do not replace the trained safety specialist. The role of the CDSO is largely dependant on the commander/supervisors direction but as a minimum will include the following:

a. Assist the commander or supervisor in meeting their safety program responsibilities.

(1) Provide information on safety issues and risk management programs.

(2) Assist in reporting and investigation of accident.

(3) Provide safety training and safety briefing for employees.

(4) Conduct and document Standard Army Safety and Occupational Health Inspections (SASOHI) of administrative workplaces and low risk organizational facilities.

b. Point of contact (POC) and liaison with the installation/branch safety office.

(1) Coordinate with/accompany installation safety representative on safety surveys and inspections of organization workplaces and facilities.

(2) Distribute safety promotional literature and posters provided by the installation safety office.

(3) Notify the installation/branch safety office of safety, health, or fire prevention concerns or problems.

(4) Schedule, attend, and record periodic organization safety committee meetings.

c. Maintain records of periodic safety inspections of organizational elements.

d. Provide information to commanders and supervisors on safety related issues.

e. Track, investigate, and document all incidents involving injury or damage. Report and investigate as required by AR 385-40.

f. Coordinate safety, health, or fire prevention related work orders with the installation/branch safety office to ensure risk assessment code is assigned and validated.

g. Establish and maintain an organizational safety and occupational health bulletin board.

h. Maintain a basic safety publications library consisting of appropriate safety, occupational health and fire prevention regulations, directives, and SOPs. As a minimum, CDSOs will maintain or have access to AR

385-10, AR 385-40, AR 420-90, this regulation and the local installation single source safety and fire prevention documents.

B-2. Appointment criteria and process. Selection and assignment criteria for CDSO will be IAW AR 385-10 paragraph 2-1f. CDSOs duty performance will be rated as a major part of the individuals job performance. Written appointment orders for the CDSO will be forwarded to the installation/branch safety office within 1 week of appointment.

B-3. Essential Elements. Training for the CDSO should focus primarily on the three key elements of a functional safety program:

a. The ability to recognize potential hazards and develop control measures to abate these hazards.

b. An understanding of what constitutes a reportable or recordable accident and how to investigate and report incidents and accidents.

c. A general understanding of how to organize and track accident data to identify trends and implement control measures.

B-4. Training. TRADOC installations/branch safety offices will conduct a collateral duty training course at least once each quarter. As a minimum, the course will consist of an 8 hour block of instruction on the below listed topics. The overall length of training is dependent upon additional local requirements.

<u>Topic</u>	<u>Length</u>
Army Safety Policy	.5 hour
CDSO Responsibilities	.5 hour
Hazard Identification	1 hour
Risk Management	2 hours
Hazard Abatement	1 hour
Accident Reporting	2 hours
Safety Inspections	1 hour

B-5. Documentation/Record Keeping. Records of all personnel attending CDSO courses will be maintained on file at the installation/branch safety office and at the CDSO's organization. CDSOs will be required to attend a refresher course every 3 years. Refresher training will consist of 2 hours of current program updates and the introduction of any new requirements.

Appendix C TRADOC Centralized Accident Investigation (CAI) Program

C-1. Objectives. The TRADOC Centralized Accident Investigation (CAI) Program establishes procedures for investigating on-duty Class A or B accidents as defined in AR 385-40, DA PAM 385-40 and other categories of accidents as directed by Director, Command Safety.

C-2. Policy. A CAI board will investigate all on-duty Class A and B accidents, training accidents, Class C aviation accidents and selected other categories of accidents. All CAI boards will employ general use accident investigation procedures IAW AR 385-40 unless directed to do a limited use accident investigation by Director, Command Safety.

C-3. Responsibilities.

a. The first commander in the troop chain of command who becomes aware of an on-duty Class A accident will—

(1) During duty hours, notify Director, Command Safety at (757) 728-5904; (757) 727-2194 or DSN 680-5904/2194. During non-duty hours notify the TRADOC EOC, (757) 727-2256 or DSN 680-2256.

(2) Report incidents or events IAW AR 385-40, paragraph 3-2, and paragraph 2-3c of this regulation.

(3) Report incidents or events listed in AR 190-40, appendix B and C, to the nearest MP station as soon as the first commander in the troop chain of command becomes aware of the incident or event.

(4) Coordinate all actions with appropriate authorities for accidents occurring in areas not under Army control.

(5) Restrict access to the accident scene to commanders and other agencies conducting concurrent investigations.

(6) Provide MP or Criminal Investigation Division (CID) personnel access to items of evidence that could be destroyed by time or the elements before the CAI board arrives at the accident site.

b. Commanders, TRADOC installations are appointing authorities for CAI boards. This authority will not be delegated further. Director, Command Safety will appoint CAI boards for all other TRADOC service schools and activities on non-TRADOC installations. The appointing authority will—

(1) Appoint the president and other members of the CAI board from organizations other than the activity incurring the accident. Individuals from that activity may be designated as advisers (nonvoting) to enhance the investigation and reporting of the accident.

(2) Give priority to accident investigation and reporting duties to ensure prompt completion of CAI reports.

(3) Ensure that no member of the CAI board has a personal interest in the outcome of the accident investigation.

(4) Appoint a member of the servicing safety office to act as safety POC for the CAI board.

(5) Publish orders for CAI board.

(6) Establish a POC to process information concerning the accident and progress of the investigation to Director, Command Safety POC.

(7) Coordinate the activities and reports prepared and submitted by all agencies concerned, and send to Director, Command Safety POC.

C-4. Abbreviated Centralized Accident Investigation, Ground (CAIG). Director, Command Safety has authority to direct Abbreviated CAI (ACAI) for specific accidents.

a. An abbreviated CAI is a formal in-depth investigation, and will be conducted IAW AR 385-40, DA Pam 385-40, and this regulation. The investigation board may consist of one individual, unless otherwise directed by Director, Command Safety, and the one individual may be from the installation safety office.

b. A copy of the abbreviated CAI report will be provided to Command Safety Office, ATTN: ATCS-S, 5A North Gate Road, Fort Monroe, VA 23651-1048, not later than 90 days after occurrence of the accident.

C-5. Procedures. Upon arrival at the accident scene, the board president assumes control of the site from the chain of command. He or she will direct the security of site and other tasks and keep the commander informed of the investigation's progress. At this point, responsibility for all matters is transferred from the commander to the board president.

C-6. CAI telephonic notification. Submit CAI telephonic notification to HQ TRADOC (RCS exempt: AR 335-15, paragraph 5-2e(7)). Provide the information in figure C-1 during duty hours to Director, Command Safety, (757) 728-5904, (757) 727-2194 or DSN 680-5904/2194, and to Emergency Operations Center, (757) 727-2256 or DSN 680-2256, after duty hours.

Appendix D

Notification of Department of Defense Explosives Safety Board (DDESB) for Explosives and Chemical Agent Mishaps

D-1. Commanders of installations and activities with an explosives or chemical agent mission will—

a. Ensure explosives and chemical agent mishaps are investigated IAW requirements in AR 385-40 and reported to the U.S. Army Safety Center within appropriate time requirements. When forwarding explosives and chemical agent mishap investigation reports to the U.S. Army Safety Center, two copies shall be provided. The copies shall be forwarded with a memorandum requesting one copy be forwarded, via the Office of the Director of Army Safety, to the DDESB.

b. Ensure notification (during duty hours) of explosives mishaps is made to the U.S. Army Technical Center for Explosives Safety. Ensure notification (during duty hours) of chemical agent mishaps IAW chemical event reporting requirements of AR 50-6.

1. DATE OF ACCIDENT: _____		TIME OF ACCIDENT: _____	
2. TYPE OF EQUIPMENT AND NOMENCLATURE INVOLVED: _____			
3. UNIT HAVING ACCIDENT: _____		MACOM: _____	
4. POC: _____	POSITION: _____	CDR: _____	SAFETY TECH: _____
OTHER: _____		TELEPHONE DSN: _____	COMM: _____
5. LOCATION OF ACCIDENT: _____			
6. HAZARDOUS/SENSITIVE MATERIALS INVOLVED: _____		YES ____ NO ____	
SITE SECURE: _____		YES ____ NO ____	
7. WEATHER CONDITIONS AT TIME OF ACCIDENT: _____		DAY ____ NIGHT ____ OTHER: _____	
8. TOTAL NUMBER OF PEOPLE INVOLVED: OFF: ____ WO: ____ ENL: ____ CIV: ____			
HIGHEST RANK INVOLVED: ____ NUMBER OF INJURIES: ____ NUMBER OF FATALITIES: ____			
9. BRIEF SYNOPSIS OF EVENT: _____			
10. HAS ACCIDENT SCENE BEEN DISTURBED (EXCEPT TO EVALUATE ACCIDENT VICTIMS)? YES ____ NO ____			
*IF DISTURBED, WHERE _____			
11. PHOTOGRAPHS AND/OR SKETCHES TAKEN PRIOR TO REMOVAL? YES ____ NO ____			

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Figure C-1. Format for CAI telephonic notification to HQ, TRADOC

c. Ensure a follow-up report for explosives mishaps is made to the U.S. Army Technical Center for Explosives Safety within 2 workdays of initial notification. Ensure a follow-up report for chemical agent mishaps is made to the Office of the Director of Army Safety within 2 workdays of initial notification.

D-2. The Army Safety Center, as the repository of accident reports, is responsible for forwarding one copy of explosives and chemical agent mishap investigation reports to the Office of the Director of Army Safety.

D-3. The Office of the Director of Army Safety will—

a. Provide notification (during duty hours) of chemical agent mishaps to the Chairman, DDESB.

b. Provide a follow-up report for chemical agent mishaps, within 2 working days of initial notification, to the Chairman, DDESB.

c. Provide a copy of explosives and chemical agent mishap investigation reports to the Chairman, DDESB.

D-4. The U.S. Army Technical Center for Explosives Safety will—

a. Provide notification (during duty hours) of explosives mishaps to the Chairman, DDESB.

b. Provide a follow-up report for explosives mishaps, within 2 working days of initial notification, to the Chairman, DDESB.

D-5. Requirements for notification.

a. An initial telephonic report to the Office of the Director of Army Safety and to the U.S. Army Technical

Center for Explosives Safety is required for explosives and/or chemical agent mishaps resulting in one or more of the following:

(1) DoD military, civilian, or contractor fatality.

(2) \$200,000 or more property damage.

(3) Production loss of 72 hours or more.

(4) Loss of major weapons system (e.g., tank, aircraft, ship, or large missile).

(5) Probable public interest such as network media coverage.

b. A message to the Office of the Director of Army Safety and to the U.S. Army Technical Center for Explosives Safety is required for explosives and/or chemical mishaps resulting in one or more of the following:

(1) \$10,000 or more property damage.

(2) Production interruption exceeding 24 hours.

(3) Individuals exhibiting physiological symptoms of agent exposure.

(4) An unintentional or uncontrolled release of a chemical agent where the agent quantity released to the atmosphere is such that a serious potential for exposure is created by exceeding the applicable maximum allowable agent concentration levels for exposure of unprotected workers or the general population.

c. Telephonic and electronically transmitted reports shall be provided as soon as possible and shall include as

much of the following data as may be immediately available.

- (1) Name and location of reporting activity.
- (2) Name, title, and telephone number of person reporting and of contact at scene of the accident.
- (3) Location of the mishap (activity, city, installation, building number or designation, road names, or similar information).
- (4) Item nomenclature, Mark (Mk), Model (Mod), Federal Supply Code (FSC) Federal Item Identification Number (FIIN), Department of Defense Activity Code (DODAC), or Naval Ammunition Logistics Code (NALC).
- (5) Quantity involved (number of items and net explosive weight (NEW)).
- (6) Day, date, and local time of initial significant event and when discovered.
- (7) Description of significant events (include type of operation involved).
- (8) Number of fatalities (military, DoD civilian, or other civilian) and persons injured.
- (9) Description and cost of material damage (government or non-government).
- (10) Cause.
- (11) Action planned or taken (corrective, investigative, or Explosives Ordnance Detachment (EOD) assistance).
- (12) Effect on production, operation, mission, or other activity.
- (13) Details of any remaining chemical agent hazard or contamination, if applicable.
- (14) Are any news media aware? (yes or no)

D-6. Follow-up reports shall be submitted to DDESB by way of priority/precedence, electronically transmitted message within 2 working days after notification of an occurrence has been received, and shall contain any additional information on the data elements contained in paragraph D-5c, above.

D-7. Investigation Reports.

a. An investigation report shall be submitted to the Army Safety Center as soon as the investigating board has obtained release from the DoD component concerned for all explosives and/or chemical mishaps meeting the criteria listed above. Mishaps occurring during the transportation of ammunition, explosives and chemical agents by commercial carriers are excluded from this requirement unless so directed by contract.

b. The following mishaps, although not required to be reported, shall be reported whenever the information

to be obtained can contribute to the development or verification of safety procedures or standards:

(1) An unplanned explosion, fire, or functioning of ammunition and explosives that does not meet the requirements of paragraphs D-5a or D-5b above for mandatory reporting, when in the opinion of the investigating officer it produces data that may be of permanent value in evaluating explosives or chemical agent safety.

(2) A mishap relating to the employment of ammunition, explosives, or chemical agents during combat.

(3) Accidental and deliberately inflicted gunshot wounds from small arms handling, test firing operations, and similar incidents that result from personnel error, inadequate training, or malfeasance.

c. The following information, as applicable, shall be included in investigation reports.

(1) Event circumstances.

(a) Location, date, and local time.

(b) Type of operation or transportation mode engaged in at time of the mishap (include reference to applicable standing operating procedure or regulatory document).

(c) Description of mishap.

(d) Quantity, type, lot number, configuration, and packaging of ammunition, explosives, or chemical agent involved in the mishap.

(e) Type of reaction(s): single reaction (such as detonation, deflagration, fire, release, or activation); multiple reaction (such as detonation and fire); communication of reactions, such as fire caused fire, fire caused detonation, and detonation caused detonation, and the time between events.

(f) Possible or known causes.

(2) Event effects. A copy of aerial and ground photographs taken of the mishap site. When appropriate, include photographs (color whenever possible), maps, charts, and overlays, showing or listing the following:

(a) Number of persons killed or injured.

Indicate cause of fatalities and injuries and location of affected persons with respect to the mishap origin.

(b) Property damage at the mishap origin.

(c) Area containing property with more than 75 percent destruction.

(d) Area containing property damage beyond economical repair (50 to 75 percent).

(e) Area containing repairable property damage (1 to 49 percent). Indicate event origin and a description of the damage and its cause.

(f) Radii of uniform and of irregular glass breakage (when possible, include type and dimensions of glass broken at farthest point).

(g) Locations and dimensions of craters.

(h) Distances from the mishap origin at which direct propagation occurred and whether from blast, fragments, or firebrands.

(i) Approximate number, size, and location of hazardous fragments and debris.

(3) Factors contributing to or limiting event effects. When appropriate, describe the influence of the following factors on the mishap.

(a) Environmental and meteorological (such as cloud cover, wind direction and velocity, temperature, relative humidity, electromagnetic radiation, and electrostatic buildup and/or discharge).

(b) Topography (such as hills, forests, lakes).

(c) Structural features at the mishap origin (such as exterior and interior walls and bulkheads, roofs and overheads, doors and hatches, cells or magazines, earth cover, and barricades).

(d) Safety features, other than structural, at the mishap origin (such as remote controls, sprinklers or deluge systems, detectors, alarms, blast traps, and suppressive shielding).

(e) Structures. Position, orientation, and type of construction of all structures, damaged or not, located within the maximum radius of damage. When either the intermagazine, intraline, or inhabited building distances are greater than the radius of actual damage, show the location, orientation, and type construction of all structures situated within the Q-D radii.

(f) Vessels, vehicles, and mobile equipment. Location within maximum radius of damage, or if the Q-D requirements are greater, location within the K9, K18, K24, and K30 Q-D radii.

(g) Personnel. Location within maximum radius of damage, or if the Q-D requirements are greater, location within the K9, K18, K40, and K50 Q-D radii.

(h) Explosives, amounts, and chemical agent. Location, type, configuration, amounts, and protection provided within maximum radius of damage, or if the Q-D requirements are greater, location within the applicable magazine and intraline radii.

(4) Analyses, conclusions, and recommendations.

(5) For chemical agent mishaps, include the following:

(a) The safety training that personnel received applicable to duty being performed at the time of the mishap.

(b) The availability, type, and use of protective equipment.

(c) A description of the emergency measures taken or performed by individuals at the scene of the mishap.

(d) A summary of applicable medical data.

(e) A sketch showing locations where disabling injuries occurred, and indicating the distance and direction from the agent source.

(f) The facility filter types and the facility ventilation and air turnover rates.

(g) The rate and manner of agent releases and any data used to determine the downwind hazard.

(h) The status and disposition of chemical agent remaining at the mishap.

(i) The details of any remaining chemical agent hazard and contamination, if applicable.

Appendix E

Evaluation Procedures for Use of Explosives and Pyrotechnics in Public Demonstrations, Exhibitions, and Celebrations

E-1. Procedures. Installation commanders will ensure the requirements listed below are met prior to granting approval to use explosives and pyrotechnics in public demonstrations, exhibitions, or celebrations.

E-2. Approval. Functions conducted by military or DA civilian personnel, whether on or off post, require HQ TRADOC (ATCS-S) approval. Installations will request approval through command channels to Commander, TRADOC, ATTN: ATCS-S, Fort Monroe, VA 23651-1048, NLT 45 days prior to the event (RCS exempt: AR 335-15, paragraph 5-2i). Request will include review by IBSM and will comply with the following restrictions and constraints:

a. Prepare written documents, to include risk assessment, specifying the responsibilities and procedures to be followed.

b. Limit delivery of explosives or pyrotechnics to the morning of the demonstration. Do not store non-military explosives and/or pyrotechnics on the installation.

c. Establish stringent guard and security controls for the material until it is expended or returned to home station.

d. Establish controls to prevent spectators and other non-participants from entering the storage or demonstration area.

e. Aim all directional fire away from personnel and structures. Static firing will be at a safe distance from

personnel and structures. Attach a scaled diagram showing distances of personnel and structures from static firings.

f. Adequate emergency medical evacuation and fire fighting personnel and equipment will be available in the immediate vicinity of the demonstration area during the period of the demonstration.

g. Ensure the demonstration area is free of duds and hazardous residual material.

E-3. Contractor demonstrations. Functions conducted by civilian contractors will meet the following additional requirements:

a. A properly executed contract will specify the type and quantity of explosives and pyrotechnics to be used in the demonstration.

b. Risk assessment identifying hazards and risks to be eliminated, reduced, or accepted is reviewed by IBSM and approved by installation commander.

c. Liability insurance coverage, both bodily injury and property damage, will be required by the contractor.

d. The handling and detonating of explosives or pyrotechnics will be accomplished by the contractor or his or her employees.

e. No DA personnel will be permitted to handle or activate any of the items used in the demonstration.

Appendix F Format for Submitting Nominations for TRADOC Commander's Aviation Accident Prevention Award

MEMORANDUM FOR Commander, U.S. Army Training and Doctrine Command, ATTN: ATCS-S, Fort Monroe, VA 23651-1048

SUBJECT: Nomination for TRADOC Commander's Aviation Accident Prevention Award, Fiscal Year

1. (Name of installation and unit) is nominated for the TRADOC Commander's Aviation Accident Prevention Award, Fiscal Year.

2. The (current) fiscal year accident experience computations include all accidents, disabling injuries, and damages chargeable under AR 385-40.

a. Number of flying hours.

b. Class A, B, and C accidents per 100,000 flying hours. (Show date, aircraft type, and serial number for all accidents over \$10,000.)

c. Class D accidents per 100,000 flying hours. (Show date, aircraft type, and serial number for all accidents below \$10,000.)

d. Injuries per 100,000 flying hours.

e. Fatalities per 100,000 flying hours.

f. Total accident cost (total Class A, B, C, and D).

g. Accident causes:

(1) Crew error (number).

(2) Maintenance error (number).

(3) Material failure/malfunction (number).

(4) Environmental (as defined in AR 385-40).

3. (Name of installation and unit) has met the criteria as indicated below:

a. A high degree of command and staff emphasis on aviation safety.

b. Documented specific aviation safety program objectives in orders, SOPs, policies, and directives.

c. Establishment of accident prevention functions IAW the provisions of current directives from higher headquarters.

d. An effective accident prevention promotion and education program.

e. Complete and accurate accident reporting, identification of accident causes and corrective measures, or an effective inspection and survey program of prevention.

NOTE: Paragraph 3b above requires submission of data to support a broad view of the aviation accident prevention program. Submit specific documentary evidence to substantiate statements, if desired.

Appendix G Preparation of Waiver/Exemption Requests

G-1. Waivers. Waivers are granted for specific situations and are applicable only to the hazards and exposures specified in the request and related correspondence. Waivers will not be interpreted to apply to other operations, locations, or conditions not specifically mentioned in the basic request, enclosures, and endorsements. Base waiver requests on a thorough study, hazard analysis, and an assessment of the resulting risk. Waiver must present adequate information to allow HQ TRADOC (ATCS-S) to determine the extent of the noncompliance. Granting of waivers is based on the premise that special precautionary safety measures will be taken to reduce the hazards inherent to noncompliance.

G-2. Preparation of waiver requests. When the commander determines a waiver is necessary, prepare a request containing the following information:

a. Description of the condition. Prepare a general map of the area, including the entire danger area around the facility. This map must be scaled to 1 inch equals

400 feet (1:4800) and oriented accurately. It must show location and identification of public and installation facilities and airfields exposed to the explosives hazard. Note topographic features bearing on the safety evaluation. Identify forest areas that may screen against blast or become a fire hazard. The general area map will include an area around the explosive hazard equal in radius to the appropriate distance required by Q-D tables, plus 25 percent. Prepare a detailed map of the explosives storage and operating area. This map will show, with suitable symbols, the location and use of the various types of buildings, as appropriate. For example, reinforced concrete bunkers, igloo magazines, above ground huts, "A" frames, renovated buildings, shipping facilities, administrative and service buildings, missile storage buildings, launcher racks, missile component storage facilities, missile assembly buildings, and fueling areas. This scaled map will delineate, by circles and arcs, the actual and required distances between the various facilities. When appropriate, show inhabited buildings and interline and intermagazine distances. Note barricades or topographic features with a significant shielding effect. Indicate location and type of fencing, points of entry into the area, and internal road grid. These distances will not be arbitrarily measured from maps, but rather confirmed by actual measurement.

b. Buildings and line layouts. Prepare a drawing showing the structural protective features, including structural materials used, fire protection systems, exits, deluge systems, barricades, operational shields, and reinforced concrete walls. Drawings of existing facilities must be as built, showing existing conditions and indicate:

- (1) Explosive material used.
 - (2) Material flow.
 - (3) Storage areas.
 - (4) Work stations.
 - (5) Number of personnel (working or transient) at each work station.
 - (6) Maximum quantity of explosives permitted at each work station or storage site.
 - (7) Installed reproduction equipment.
 - (8) Material handling methods (including conveyor belt speeds).
 - (9) Spacing of items, if applicable.
 - (10) Sources and disposition of all material entering or leaving the line.
- c. Missile sites. Prepare detailed area maps for missile storage and launching sites IAW paragraph G-2a, above and include additional information as required for careful evaluation of the hazards involved.

d. Narrative description. Prepare a hazard analysis and risk assessment of the conditions. Include relevant data, not shown on maps or drawings, that is required for accurate evaluation of the condition and the effect disapproval may have on military operations.

e. Violated safety regulations. Reference specific safety standards, requirements, and conditions, cited by paragraph that will not be complied with. General statements are not acceptable.

f. Justification. State that compliance with mandatory safety requirements cannot be accomplished locally and the reason(s) why. Justification must prove that every reasonable and prudent alternative to comply with requirements has been explored and found impossible or impractical.

g. Precautionary actions. Describe precautionary measures taken to achieve safety in operations during the period of the waiver. Specify where equivalency to regulatory standards or requirements is achieved. CAUTION: For certain weapons systems, the development of new tools or work methods by user units is specifically prohibited unless approved by proper authority.

h. Corrective action. Include a plan of action to eliminate the conditions covered in the request and actions that are being taken or will be taken and a schedule for accomplishing these actions.

G-3. Approval Authority.

a. Approval authority for waiver/exemption requests will be IAW AR 385-64. All locally approved waiver/exemption requests will be forwarded to HQ TRADOC, ATTN: ATCS-S within thirty (30) days.

b. No waiver/exemption requests will be granted for hazardous waste sites IAW Resource Conservation and Recovery Act (RCRA).

G-4. Exemptions. Information required for exemptions is identical to that required for waivers, except for a statement of why immediate corrective measures are impractical and would impair overall defense posture.

Appendix H Safety Procedures for Tactical Water Operations

H-1. Mission Planning. Accurate and detailed risk assessments will be used to protect the force participating in amphibious crossing, stream crossing, and rafting/bridging. FM 90-13 and appropriate tactical and technical manuals will be used in conjunction with FM 100-14 to identify hazards and develop appropriate controls appropriate to the mission, enemy, terrain, troops, and time available (METT-T) factors of the mission being planned.

H-2. The following list reflects the commonly used controls to reduce the risk of specific hazards for water operations.

- a. Use of qualified lifeguards, divers, medical, and rescue personnel with associated equipment.
- b. Plan and conduct of accurate, detailed reconnaissance of the site, both near and far bank.
- c. Plan and conduct detailed rehearsals for all personnel participating in the operations. Wargame and practice emergency reaction procedures.
- d. Prepare and utilize detailed risk assessment based on the aspects of METT-T, vehicle and equipment characterizes.
- e. Properly mark entrance and exist lanes and crossing points for the operations.
- f. Make provisions for emergency lighting and pre-crossing checks for all personnel and equipment.
- g. Ensure qualified crossing personnel and guides are completely knowledgeable on emergency reaction procedures.
- h. Ensure primary and alternate means of communications and signals are established and maintained.
- i. Ensure all personnel are briefed and understand emergency evacuation procedures and proper weight distribution when moving through or over water in/out of vehicles.

Appendix I

Safety Procedures for Recreational Water Activities

I-1. Swimming pools.

- a. Annually, or before opening any swimming pool facility, inspect the facility for sanitary conditions, maintenance and serviceability (see TM 5-662), illumination criteria (see TM 5-811-1), and safety and health to meet statutory and regulatory requirements for life saving equipment and provisions for lifeguards (TB MED 575).
- b. Follow ground-fault circuit interrupter and other electric wiring and equipment requirements in the National Electric Code, article 680.
- c. Close pools if the required black 6" diameter disc painted at the deepest part of the pool is not clearly visible from the pool sides at a distance up to 10 yards.
- d. Post rules for safe operation of pools to be readily seen by all pool users. Develop rules from information in TB MED 575 and from safe operating suggestions, dangerous practices, and dangerous conditions in TM 5-662, section II.

e. All swimming pools, when in use, require a minimum of two fully qualified lifeguards on duty. When the total number of persons in the swimming pool and the controlled area surrounding the pool exceed 150, provide additional lifeguards on the basis of one lifeguard per 75 persons. Lifeguards will be at least 18 years old and certified in cardiopulmonary resuscitation (CPR).

f. Ensure an emergency telephone is immediately available.

g. Ensure that pool equipment is safe to prevent injury from cutting, pinching, puncturing, abrading, slipping, or falling.

h. Secure pool areas when lifeguards are not present for duty or when thunderstorms are imminent. Protect outside pools from unauthorized use by enclosing entire pool with at least a 6' link fence. Channel all patrons into the bathhouse through a single controlled entrance way.

i. Equip pools with life saving equipment recommended in TB MED 575, paragraph 8.

I-2. Natural beaches.

a. Make annual or pre-opening inspection of each swimming area to meet safety and health requirements.

b. All natural beaches designated as swimming areas will have at least two lifeguard towers, four lifeguards, and one boat for each 1000 feet of beach or two lifeguards for 500 feet of beach or less. Use a rescue board instead of a rescue boat in areas where the IBSM determines a board is more effective.

c. Place marking signs and buoys to define the swimming areas.

d. Ensure an emergency telephone is immediately available.

e. Life preservers, ring buoys, and other personal flotation devices (PFDs) must meet U.S. Coast Guard requirements.

f. Post rules for safe use of the beach usually on but at least near the lifeguard tower.

I-3. Recreational boating.

a. Before being granted permission to operate any Army-owned power boat or sailboat, the operator will demonstrate a working knowledge of safe boat handling to the boat dispatcher.

b. Post SOPs for all boats, to include rowboats, by the dock area where boats are dispatched.

c. Do not permit use of Army-owned boats without U.S. Coast Guard required and approved boating equipment aboard. Boats will be properly registered with a hull identification number prescribed by the U.S. Coast

Guard and the state. At least one U.S. Coast Guard approved life saving device will be on board for each person aboard the boat. Non-swimmers and children will wear a PFD at all times in boats under Army control.

d. Safe loading of boats and maximum weight and person capacity will comply with 33 CFR 183.

e. Installations are encouraged to contact the Coast Guard Auxiliary to arrange for courtesy marine examinations of all Army recreation boats. All owners of private boats stored on post should take advantage of these examinations as well.

I-4. Water skiing.

a. Army-owned powerboats towing water skiers will have at least two people aboard, one to operate the boat and to maintain visual contact with the skier.

b. Water skiers must prove swimming ability before water skis are issued or used.

c. All skiers will wear U.S. Coast Guard approved PFD.

Appendix J Three Tiers of Safety (Command Level, Leader Level, Individual Level)

The three tiers of safety specify force protection responsibilities for the chain of command and every individual.

a. Tier 1—Command Level.

(1) Provide command climate which ties safety into force protection.

(2) Plan/resource for safety.

(3) Establish standard for safety.

(4) Train consistent with abilities.

(5) Make risk acceptance decisions.

b. Tier 2—Leader Level.

(1) Reinforce command climate on safety.

(2) Identify and eliminate/control safety hazards.

(3) Emphasize performance to standards.

(4) Make risk decisions; supervise/follow-up.

(5) Assess risks.

c. Tier 3—Individual Level.

(1) Take responsibility.

(2) Do something about unsafe acts.

(3) Modify your own risk standards.

(4) Be part of the buddy system.

(5) Work as a team (crew coordination).

Appendix K Instructions for Completion of Quantity Distance Verification, TRADOC Form 385-2-4-R-E

Block 1, Installation. List the site name or designation.

Block 2, Date. Self-explanatory.

Block 3, Type of storage site. Indicate the type of facility (i.e., standard earth covered, stradley, modified stradley) and dimensions in feet.

Block 4, Storage site number. List the bunker, storage pad, workshop, loading dock, holding area, or similar facility by number and/or letter, as appropriate.

Block 5, Hazard Class. List all Hazard Class and Divisions which apply to the storage location (i.e. (18) 1.1, (21) 1.2, (12) 1.2, 1.3, 1.4).

Block 6, Targets on which required distance is based. This is the exposed site (ES). List the exposure that expressly limits the explosives quantity (Allowable Limits/Pounds) in the facility as indicated by Identification Number," (e.g., inhabited building, distance (IBD), public traffic route (PTR), intermagazine distance, (IM) distance, intraline (IL) distance, etc.).

Block 7, Type Distance. Is this (ES) an IBD, PTR, IL, or IM distance? Is it barricaded (B) or unbarricaded (U) (i.e. IL (B), IL (u), PTR, IM).

Block 8, Quantity Distance Separation. For **Actual Feet**, list the distance between the explosive facility and the exposure that is the Determining Factor. Under **Quantity Distance Separation for Required Feet**, list the distance required by DA Pam 385-64, chapter 9.

Block 9, Maximum Allowable Net Explosive Weight (NEW) in Pounds. Determine the authorized amount based on actual distance of ES.

Block 10, Remarks. Remarks will be pertinent information essential to the safe operation of the facility.

Block 11, Prepared By. The preparer of the license will sign here. (Note: The license will be prepared by a knowledgeable person in the licensing organization).

Block 12, Certified By Safety. The IBSM will certify by signing and dating the explosives storage license.

Glossary

Section I Abbreviations

AAPS	Aviation Action Prevention Survey
A&D	admission and disposition

ADIP	Army Driver Improvement Program	EEI	essential elements of information
ALARA	as low as reasonably achievable	EOC	Emergency Operations Center
ALSS	Aviation Life Support System	EOD	explosive ordnance disposal
AMC	U.S. Army Materiel Command	EST	eastern standard time
AMV	Army motor vehicle	FECA	Federal Employees' Compensation Act
ARA	Army Radiation Authorization	FOD	foreign object damage
ARMS	Aviation Resource Management Survey	FTX	field training exercise
ARP	Army Radiation Permit	GSA	General Services Administration
ATV	all-terrain vehicle	HAZCOM	hazardous communication
ASO	aviation safety officer	HAZMAT	hazardous material
ASP	ammunition supply point	HW	hazardous waste
BASOPS	base operations	IAW	in accordance with
CAIG	Centralized Accident Investigation, Ground	IBSM	installation/branch safety manager
CFR	Code of Federal Regulation	IBSO	installation/branch safety officer
CID	Criminal Investigation Division	IET	initial entry training
CME	courtesy marine examination	LBE	load bearing equipment
CofS	chief of staff	LRPO	local radiation protection officer
CP	career program	LSAT	leader safety awareness training
CPR	cardiopulmonary resuscitation	MACOM	major Army command
CSM	Command Sergeant Major	MDI	military disabling injuries
CSO	Command Safety Office	MEDEVAC	medical evacuation
DA	Department of the Army	METT-T	mission, enemy, terrain, troops, and time available
DAESC	Department of the Army Explosives Safety Council	MOPP	mission-oriented protection posture
DARA	Department of the Army Authorization	MP	military police
DASAF	Director of Army Safety	MPH	miles per hour
DCSBOS	Deputy Chief of Staff for Base Operations Support	MSC	major subordinate command
DCSCD	Deputy Chief of Staff for Combat Developments	MTOE	modification table of organization and equipment
DCSDOC	Deputy Chief of Staff for Doctrine	NAF	non-appropriated fund
DCST	Deputy Chief of Staff for Training	NATO	North Atlantic Treaty Organization
DDC	Defensive Driving Course	NCOIC	noncommissioned officer in charge
DDESB	Department of Defense Explosives Safety Board	NEW	net explosive weight
DoD	Department of Defense	NRC	Nuclear Regulatory Commission
DODAC	Department of Defense Ammunition Code	NLT	not later than
DODI	Department of Defense Instruction	NVG	night vision goggles
DPW	Director of Public Works	OHR	Operational Hazard Report
DTLOMS	doctrine, training, leader development, organization and materiel, soldiers	OE	ordnance and explosives
ECOD	estimated cost of damage	OIC	officer in charge
		OSHA	Occupational Safety and Health Act
		PAO	public affairs office(r)
		PFD	personal flotation device

PMCS	preventive maintenance check and service
POC	point of contact
POV	privately owned vehicle
QASAS	quality assurance specialist ammunition surveillance
Q-D	quantity-distance
RC	Reserve Component
RCRA	Resource Conservation and Recovery Act
RAC	risk assessment code
RMCP	Radioactive Material Control Point
ROSA	report of serious accident
RSO	radiation safety officer
SAC	Safety Action Council
SASOH	Standard Army Safety and Occupational Health
SAT	systems approach to training
SIR	serious incident report
SJA	staff judge advocate
SOP	standing operating procedure
SSRA	system safety risk assessment
TDA	table of distribution and allowance
TDY	temporary duty
TECOM	United States Army Test and Evaluation Command
TOE	table of organization and equipment
TRADOC	United States Army Training and Doctrine Command
TTP	techniques, tactics, and procedures
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine
USADACS	United States Army Defense Ammunition Center and School
USAOMMCS	United States Army Ordnance Missile and Munitions Center and School
USAR	United States Army Reserves
USAREC	United States Army Recruiting Command
USASC	United States Army Safety Center
USATCES	United States Army Technical Center for Explosives Safety
UXO	unexploded ordnance

Section II Terms

Bodies of water

All streams, rivers, lakes, oceans, ponds, and swimming pools used for water operations and water recreational activities.

Branch proponent

The service school that has primary responsibility for developing concepts, doctrine, tactics, training, techniques, procedures, organizational designs, and materiel requirements for a particular branch in the Army.

Branch safety proponent

School commandants are the safety officers for their branch, responsible for integrating safety into the development and employment of service school products (i.e., DTLOMS) and monitoring safety performance of branch units and proponent materiel systems worldwide.

Calm water

Water moving at 5 feet per second or less.

Chemical agent

A chemical compound intended for use in military operations to kill, seriously injure, or incapacitate persons through its chemical properties. Excluded are riot control agents, chemical herbicides, smoke, and flame. Pesticides, insecticides, and industrial chemicals, unless selected by DoD components for chemical warfare purposes, are also excluded.

Chemical agent mishap

Any unintentional or uncontrolled release of a chemical agent when reportable damage occurs to property from contamination, or costs are incurred for decontamination, individuals exhibit physiological symptoms of agent exposure, the agent quantity released to the atmosphere is such that a serious potential for exposure is created by exceeding the applicable maximum allowable concentration levels for exposure of unprotected workers or the general population.

Explosives mishap

An unplanned explosion or functioning of explosive material or devices (except during combat). This includes inadvertent actuation, jettisoning, and releasing or launching explosives devices. It also includes mishaps that result from off range impacts of ordinance. For mishap reporting purposes, dummy (inert) ordinance shall be considered as an explosive device any time it is used in training or test situations to simulate an actual item.

Explosives

All items of ammunition; propellants, liquid and solid; high and low yield explosives; pyrotechnics; and substances associated with the foregoing that present real and potential hazards to life or property. The term includes any device or assembly of devices that contains an explosive material. Examples are bombs, guided or unguided; water and land mines; depth charges; non-

nuclear warheads; explosive-loaded projectiles; explosive components of aircrew escape systems; missile propellants; unguided missiles; pyrotechnic, illuminating, and signaling devices; and cartridge-actuated tools, such as stud drivers.

Manpower and personnel integration (MANPRINT)

A comprehensive management and technical program to enhance human performance and reliability in the operation, maintenance, and use of weapon systems and equipment. MANPRINT achieves this objective by integrating the full range of human factors engineering, manpower, personnel, training, system safety, and health hazard considerations into the materiel development.

Residual hazard

A hazard that has not been eliminated by design.

Residual risk

Expected loss from a residual hazard. The risk remaining after one or more cycles of risk reduction efforts.

Risk

An expected loss or danger resulting from a hazard. Risk is expressed in terms of estimated severity and probability of injury or damage. Overtime, uncontrolled HIGH level risks will produce high levels of loss.

Risk acceptance

A formal or implied decision to accept the consequences of a risk based on a risk assessment.

Risk assessment

Evaluation of expected consequences of a risk against the benefits to be gained from accepting the risk.

Risk management

Making tradeoff decisions between potential/expected loss/injury versus the mission benefit of accepting the residual risk. Risk management supports the commander's overall estimate and decision making process. The objective is to accomplish the mission safely by identifying and eliminating unnecessary risk.

Rough water

Water moving at more than 5 feet per second, or a sea state of III on the Beaufort Scale.

Safety assessment report

A formal, comprehensive summary of the safety data collected during the design and development of a system. It includes the hazard potential of the item, provides risk

assessments, and recommends procedures or other corrective actions to reduce the exposure or consequences of these hazards.

Safety awareness

A consciousness of hazards and the knowledge to avoid them or minimize their effect. Safety awareness training gives leaders the knowledge and motivation to accomplish the mission while not unnecessarily jeopardizing the lives of personnel or readiness of equipment. Safety awareness leads to a proactive approach that uses risk management to evaluate the risks and eliminate those with inadequate benefits.

Safety lesson learned

A safety or health related warning, based on experience, that can be applied to current and future operations and systems to prevent recurrence of the hazard.

System safety risk assessment (SSRA)

A document that comprehensively evaluates the residual risks of an operation, activity, or materiel system and documents their acceptance by the materiel developer and combat developer.

Systems approach to training (SAT)

TRADOC's process to develop training or instructional systems which consists of five interrelated phases: analysis, design, development, implementation, and evaluation.

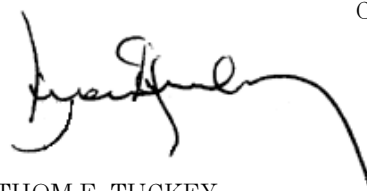
Water operations

Tactical water crossings by vehicle, boat, pontoon bridge, raft, foot, and over water operations.

FOR THE COMMANDER:

OFFICIAL:

CHARLES W. THOMAS
Major General, GS
Chief of Staff



THOM E. TUCKEY
Colonel, GS
Deputy Chief of Staff for
Information Management